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ABSTRACT

Compiled are abstracts and indexes to selected print and non-print materials related to wastewater treatment and water quality education and instruction, as well as materials related to pesticides, hazardous wastes, and public participation. Sources of abstracted/indexed materials include all levels of government, private concerns, and educational institutions. Title, author(s), publication date, cross-references, descriptors, and availability are provided for each entry. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements of their programs. This publication supplements and does not replace "Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources" or IRIS Supplements I-XV. (JN)

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Water Quality Instructional Resources Information System

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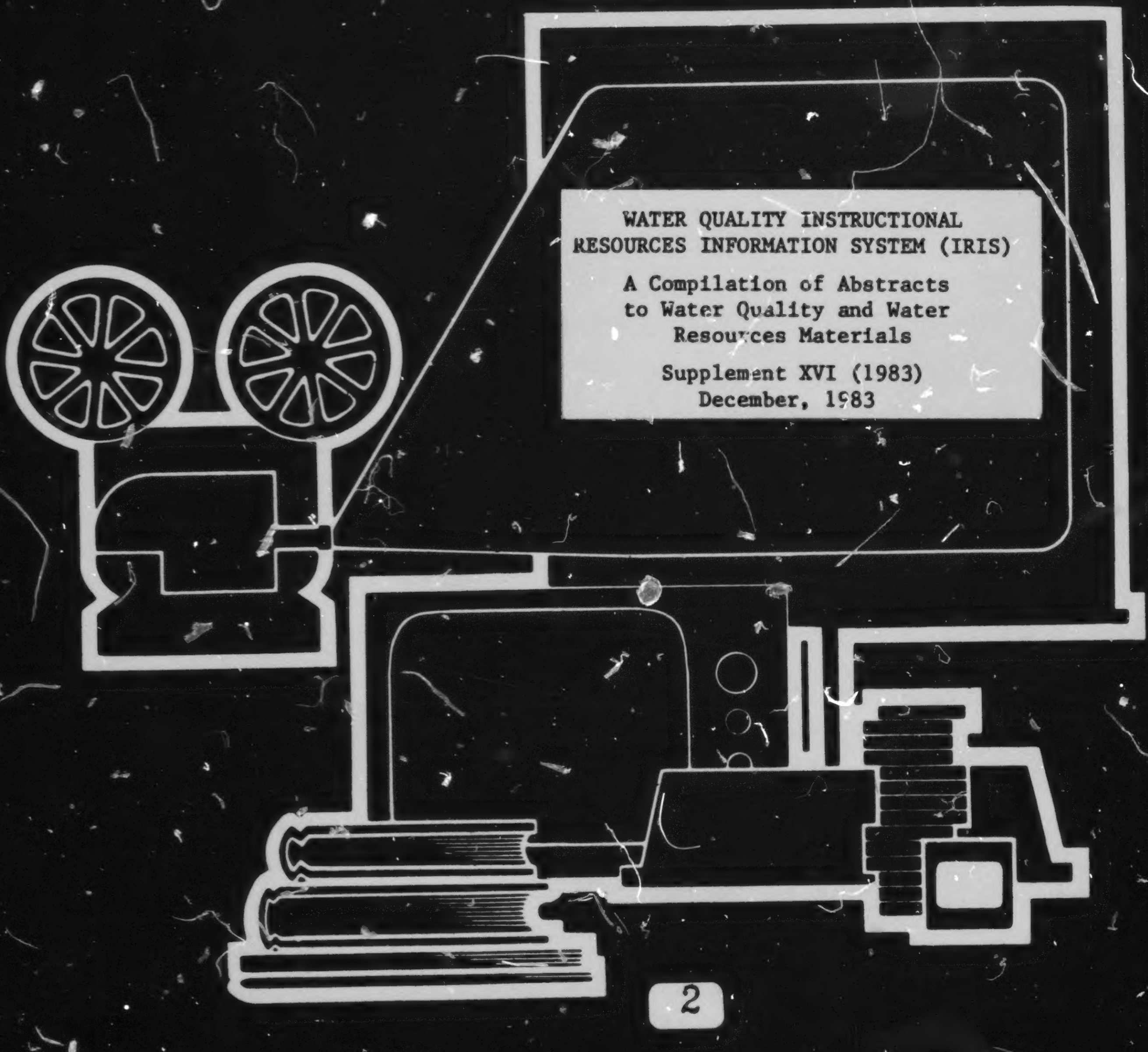

WATER QUALITY INSTRUCTIONAL
RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts
to Water Quality and Water
Resources Materials

Supplement XVI (1983)
December, 1983

Prepared by

EPA Instructional Resources Center
SMEAC Information Reference Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

as part of
Grant No. T-901366010

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Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

(614) 422-6717

I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The EPA Instructional Resources Center (water) acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the EPA Instructional Resources Center is the source of the materials.

B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this compilation, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EPA Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of this compilation and similar ones to follow and (2) by computer.

The first compilation contained resumes of selected materials processed for the previous IRIS (water) collection and resumes of selected materials of items added to the IRIS (water) collection. A limited number of copies of the compilation in paper copy and microfiche are available free of charge as long as the supply lasts from the EPA Instructional Resources Center. After the free copies of the compilations are gone, copies will be available for purchase from the EPA Instructional Resources Center.

Quarterly updates of the compilation are available by subscription on a yearly basis beginning November, 1979. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EPA Instructional Resources Center. A subscription to the quarterly supplements for 1983 is $12.00 (within the U.S.). Price to Canada and Mexico is $14.00. Prices in other Countries is $18.00. Separate quarterly supplements are $4.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched by both batch and on-line computer searches. The IRIS tapes are available for searching through the Bibliographic Retrieval Services, Inc., (BRS) and with Dialog. Any search service that currently subscribes to BRS or Dialog is able to search the IRIS data base by on-line techniques. Individuals or agencies with computer terminals and telephone connection equipment can subscribe to BRS or Dialog and do their own searches if they desire.

Information regarding BRS may be obtained by writing or phoning BRS, 1200 Route 7, Latham, NY 12110, (518) 783-1161.

Information regarding Dialog may be obtained by writing or phoning Dialog Information Retrieval Service, 3460 Hillview Avenue, Palo Alto, CA 94304, (415) 858-3775.

Plans are being made to mount IRIS tapes with other on-line vendors. Information regarding this service will be announced in a future EPA IRC Bulletin and in mailings from the EPA Instructional Resources Center.

2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EPA Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but most users of the tapes gain access to them through three major database vendors: Dialog, Systems Development Corporation (Orbit), and Bibliographic Retrieval Services. For the addresses of search services in your state that can search these databases, contact the:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EPA Instructional Resources Center for $0.03 per page plus $1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EPA Instructional Resources Center.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
2214 North Central at Encanto
Phoenix, Arizona 85004
(602) 254-6156

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. Current prices are $8.00 per article and $10.00 for articles dated prior to January 1981. For further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106
(800) 521-0600

II. How to Use the Compilation

A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered in ERIC

   a. IRIS NUMBER: EW006023
   b. PUBLICATION DATE: FEB 81
   c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
   d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
   e. DESCRIPTOR: *DESIGN; *ENGINEERING; *EQUIPMENT; *MASS BALANCE; *PROJECT DESIGN; *POLLUTION ENGINEERING; *PIPES; *WATER RESOURCES

   f. DESCRIPTIVE NOTE: 30-33P.
   g. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.

   h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2

   a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.

   b. PUBLICATION DATE -- date material was published according to information on the material.

   c. TITLE

   d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.

   e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceeded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

   f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.

g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.

h. AVAILABILITY -- information in this field indicates where the material can be obtained.

2. Sample resume of material entered into ERIC (Resources in Education)

Items entered into ERIC (Resources in Education) will have a few additional data fields.

IRIS ACCESSION NUMBER: EW006664
PUBLICATION DATE: 80
TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.
DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; *LAND USE; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *TECHNICAL EDUCATION; *WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; *WATERSHEDS

b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF
a. WATERSHED LANDS. (ED 197 941)

AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, P. O. BOX 190, ARLINGTON, VA 22210

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
P. O. Box 190
Arlington, Virginia 22210
(703) 823-0500

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EPA Instructional Resources Center.

B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.

III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about six times a year as information is available.

If you are not on the mailing list write to the EPA Instructional Resources Center. Limited numbers of some back issues are still available.

If you need information about IRIS you can also phone (614) 422-6717 with your questions.

V. Requests for Assistance in Using IRIS

A. Assistance in use of IRIS manuals
If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EPA Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

B. Assistance in accessing IRIS by computer

1. Conducting searches.

   See section VIII.

2. Subscribing to BRS, Inc. for computer searching of IRIS.

   Contact: Bibliographic Retrieval Services, Inc.
   1200 Route 7
   Latham, New York 12110
   (518) 783-1161

3. Subscribing to Dialog for computer searching of IRIS.

   Contact: Dialog Information Retrieval Service
   3460 Hillview Avenue
   Palo Alto, California 94304
   (415) 858-3775

4. Contacting a computer search service (an agency that will conduct a search for you, usually for a fee.)

   The EPA Instructional Resources Center maintains a list of agencies that can conduct searches. Most charge a fee, though some are free to qualified users in a limited geographical area.

   Phone or write to obtain information for your area.

VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EPA Instructional Resources Center plans to develop some user service products in selected areas in 1982.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse on Adult, Career, and Vocational Education
The Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work, nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management
University of Oregon
Library, Room 108
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, NW, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Huntington Hall
150 Marshall Street
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
3520 Prospect Street, NW
Washington, DC 20007
Telephone: (202) 298-9292

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

J. ERIC Clearinghouse on Reading and Communication Skills
National Council of Teacher of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics and Environmental Education
The Ohio State University
1200 Chambers Road - Room 310
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, NW, Suite 610
Washington, DC 20036
Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service (ETS)
Rosedale Road
Princeton, New Jersey 08541
Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

P. ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 West 120th Street
New York, New York 10027
Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center
Central ERIC
National Institute of Education (NIE)
Information Resources Division
1200 - 19th Street, NW
Washington, DC 20208
Telephone: (202) 254-5500

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

VII. How to Structure a Computer Search of IRIS

This explanation relates to the IRIS data base that can be searched on-line through Bibliographic Retrieval Services, Inc. or Dialog. As IRIS becomes available through other sources, information relevant to those services will be provided.

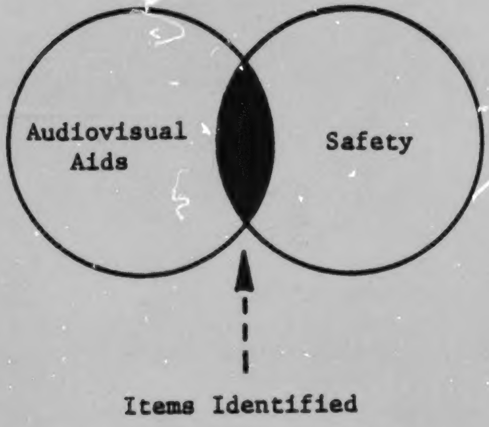
A few notes about the service are important. The following fields are searchable by computer: (1) IRIS Accession Number (EW Number), (2) ERIC Accession Number (ED Number), (3) Authors, (4) Institution, (5) Title, (6) Subject index terms, and (7) Abstracts.

If you submit a search of IRIS through BRS or Dialog, the program will search for the words you select in three fields unless the searcher requests to limit the search. These fields are: (1) title field, (2) subject index field, and (3) abstract. We recommend you use this feature especially for searches on specific terms. If you find more material than you want by this technique, you can narrow the search to items that may have the most information on the topic by limiting the search to the subject index field.

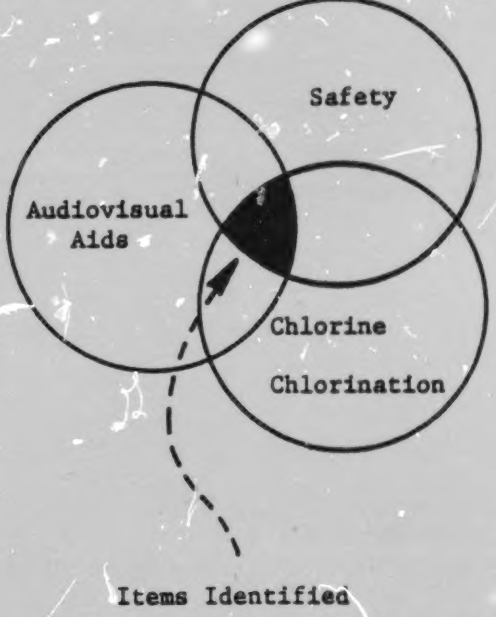
Several sample searches are listed below and on the following pages.

A. Sample 1

If you want to locate audiovisual aids that relate to safety you would submit a search with audiovisual aids and safety. Materials that included the terms both audiovisual aids and safety in the title field, the abstract and the subject index field would be identified by computer.

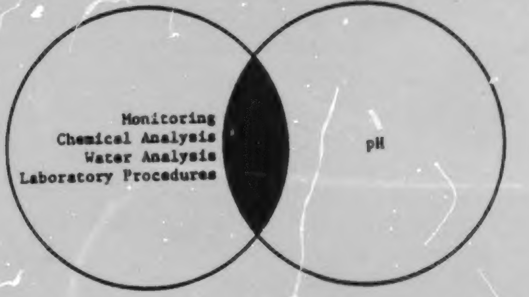


The computer program can tell you the number of items, the title of the items, or print the entire resume of each item. If you were primarily interested in audiovisual aids, safety, and chlorine you would submit a search of these three terms. You might want to include chlorides and chlorination as well as chlorine in the search. This search would identify materials that contained audiovisual aids, safety, and one or more of the words, chlorine and chlorination.


Safety
Audiovisual Aids
Chlorine
Chlorination
Items Identified

B. Sample 2

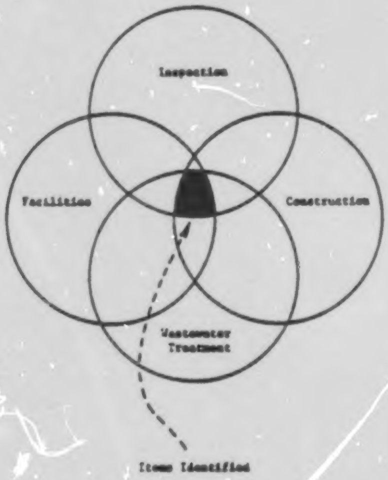
If you want to identify materials related to monitoring, you should include several related terms and the chemical, material, or situation that is being monitored. See the example below.


Monitoring
Chemical Analysis
Water Analysis
Laboratory Procedures
pH

This search would identify all the items that included any of the terms on the left and pH.

C. Sample 3

If you are interested in materials related to inspection and construction you could conduct a search of these two terms. The search would identify all materials that included both terms. If you were interested in only wastewater treatment facilities you could construct a search as diagrammed.



This search would yield specific materials and demonstrates how a computer search can help you locate materials you want.

The subject index can also be used to help you select words to include in a search. Words listed in the subject index are certain to be in the searchable fields. Therefore, selecting these terms to use in structuring a search will increase the probability of locating materials. Some words will appear in the title or abstract that are not included in the subject term field. Such words can be used to check if any materials are in the data base. If, however, you conduct a search with such a word it is usually best to include a synonym that is in the subject index.

VIII. How to Order Materials

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

A. A number of audiovisual materials can be obtained on loan or purchased from the EPA Instructional Resources Center. Most items previously available from the NTOTC office are available from the EPA Instructional Resources Center at The Ohio State University. For further information write or call.

B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
P. O. Box 190
Arlington, Virginia 22210
(703) 823-0500

C. The EPA Instructional Resources Center will provide Xerox copies of materials that are not copyrighted for $1.00 per document plus $0.03 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EPA Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

RESUME SECTION

IRIS ACCESSION NUMBER: EW005545
PUBLICATION DATE: 80

TITLE: HANDBOOK OF ENVIRONMENTAL HEALTH AND SAFETY. PRINCIPLES AND PRACTICES. VOLUME 1.

PERSONAL AUTHOR: KOREN, HERMAN

DESCRIPTOR: ECOLOGY; *ENVIRONMENTAL HEALTH; *ENVIRONMENTAL SAFETY; FOOD TECHNOLOGY; *HEALTH; HANDBOOKS; HOUSING; *INSTRUCTIONAL MATERIALS; *OCCUPATIONAL HEALTH; PESTICIDES; PUBLIC HEALTH; RECREATION; RESEARCH NEEDS; *SAFETY; *TEXTBOOKS

DESCRIPTIVE NOTE: 369P. PRICE: $25.00.

ABSTRACT: THE PURPOSE OF THIS BOOK IS TO PROVIDE A SOLID WORKING KNOWLEDGE OF EACH ENVIRONMENTAL HEALTH AREA WITH SUFFICIENT DETAIL FOR PRACTITIONERS. THE TEXT CAN BE USED IN BASIC COLLEGE COURSES IN ENVIRONMENTAL HEALTH, ENVIRONMENTAL POLLUTION, ECOLOGY, AND THE ENVIRONMENT AND MAN. THIS HANDBOOK PROVIDES A COMPREHENSIVE, CONCISE DISCUSSION OF THE FOLLOWING ENVIRONMENTAL HEALTH TOPICS: ENVIRONMENT AND HUMANS, FOOD PROTECTION, FOOD TECHNOLOGY, INSECT CONTROL, RODENT CONTROL, PESTICIDES, HOUSING ENVIRONMENT, INSTITUTIONAL ENVIRONMENT, RECREATIONAL ENVIRONMENT, AND OCCUPATIONAL ENVIRONMENT. EACH OF THE ABOVE CHAPTERS INCLUDES A SUMMARY AND A DISCUSSION ON RESEARCH NEEDS.

AVAILABILITY: PERGAMON PRESS INC., MAXWELL HOUSE, FAIRVIEW PARK, ELMSFORD, NEW YORK 10523

IRIS ACCESSION NUMBER: EW008622

TITLE: OPERATOR TRAINING - ONE APPROACH TO DEVELOPMENT AND DELIVERY.

PERSONAL AUTHOR: LLOPPING, PAUL H.

DESCRIPTOR: *INSTRUCTION; *OPERATOR TRAINING; *POSTSECONDARY EDUCATION; *RECOMMENDATIONS; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 6P.

ABSTRACT: THIS IS A BRIEF DESCRIPTION OF A SUCCESSFUL WAY TO PROVIDE TRAINING TO WATER AND WASTEWATER OPERATORS. A VARIETY OF TECHNIQUES ARE SUGGESTED.

AVAILABILITY: WATER/WASTEWATER TECHNOLOGY, LINN-BENTON COMMUNITY COLLEGE, ALBANY, OR 97321

IRIS ACCESSION NUMBER: EW008639

PUBLICATION DATE: 79

TITLE: CHLORINE, FREE - 8021.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINE; *LABORATORY PROCEDURES; *SAFETY; *SAMPLING; *WATER; *WASTEWATER
DESCRIPTIVE NOTE: 4P. FREE TECHNICAL LITERATURE

ABSTRACT: THIS IS A GUIDE FOR THE ANALYSIS OF WATER AND WASTEWATER FOR CHLORINE. THE PROCEDURES USED ARE THE DPD AND PAO METHODS. SUGGESTIONS ARE INCLUDED FOR SAMPLING, STORAGE OF THE SAMPLE, SAFETY CONSIDERATIONS, AND PROCEDURES TO FOLLOW.

AVAILABILITY: HACH COMPANY, P. O. BOX 389, LOVELAND, CO 80537

IRIS ACCESSION NUMBER: EW008961

PUBLICATION DATE: AUG 82

TITLE: STORMWATER MANAGEMENT TO IMPROVE LAKE WATER QUALITY.

PERSONAL AUTHOR: WANIELISTA, MARTIN P.; AND OTHERS

DESCRIPTOR: *FLORIDA; *LAKES; *MANAGEMENT; *RESEARCH REPORTS; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS; *WATER QUALITY

DESCRIPTIVE NOTE: PB82-227711

ABSTRACT: THIS SUMMARY PRESENTS STORMWATER IMPACTS ON AN URBAN LAKE IN FLORIDA AND RECOMMENDATIONS FOR STORMWATER AND LAKE MANAGEMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW008973

PUBLICATION DATE: JUL 81

TITLE: EVALUATION OF THE EFFECTIVENESS OF GRANULAR ACTIVATED CARBON ADSORPTION AND AQUACULTURE FOR REMOVING TOXIC COMPOUNDS FROM TREATED PETROLEAM REFINERY EFFLUENTS.

PERSONAL AUTHOR: MATTHEWS, JOHN E.

DESCRIPTOR: *AQUACULTURE; *ACTIVATED CARBON; *ADSORPTION; *ECONOMICS; *EFFLUENTS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *PETROLEUM REFINERIES; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PB81-199374

ABSTRACT: EVALUATED WAS THE EFFECTIVENESS OF TREATMENT SCHEMES TO REMOVE TOXIC POLLUTANTS FROM PETROLEUM REFINERY EFFLUENTS. A LITERATURE REVIEW ON THE COST OF ACTIVATED CARBON FOR REMOVING ORGANIC WASTES FROM PETROLEUM REFINERY WASTEWATERS WAS ALSO CONDUCTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW008982

PUBLICATION DATE: AUG 82

TITLE: ALTERNATIVE WATER DISINFECTION SCHEMES FOR REDUCED TRIHALOMETHANE FORMATION; VOLUME I. PROTOTYPE STUDIES.

PERSONAL AUTHOR: SORBER, CHARLES A.

DESCRIPTOR: *DISINFECTION; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *TRIHALOMETHANES; *THM; *WATER TREATMENT

DESCRIPTIVE NOTE: PB82-227471

ABSTRACT: THE PRIMARY OBJECTIVE OF THIS STUDY WAS TO DEVELOP TECHNIQUES TO REDUCE OR ELIMINATE THM IN FINISHED WATER WITHOUT COMPROMISING THE MICROBIOLGOICAL QUALITY OF THE WATER. A PROTOTYPE RAPID MIXING SYSTEM WAS EMPLOYED AND A NUMBER OF ALTERNATIVE DISINFECTION SYSTEMS WERE INVESTIGATED. FROM THESE DATA, A GENERAL PREDICTIVE MODEL WAS DEVELOPED AND THE ROLE OF ALGAE AND HUMIC ACIDS AS THM PRECURSORS WAS EVALUATED. A NUMBER OF CONCLUSIONS AND RECOMMENDATIONS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW00923[illegible]

PUBLICATION DATE: MAY 83
TITLE: THE CHANGING WORLD OF THE LAB ANALYST.

PERSONAL AUTHOR: BAUMGARDNER, MARK T.

DESCRIPTOR: *ANALYSTS; *ANALYTICAL TECHNIQUES; *LABORATORY ANALYSTS; *LABORATORY PROCEDURES; *REGULATIONS; *TRAINING; *TRENDS; *WASTEWATER; *WATER; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 7-8P.

ABSTRACT: THIS ARTICLE CONSIDERS SOME OF THE CHANGES IN THE ROLES AND WORK CONDITIONS OF LABORATORY ANALYSTS. MAJOR POINTS EMPHASIZED INCLUDE REGULATIONS, TRAINING, AND ANALYTICAL TECHNIQUES.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION - HIGHLIGHTS; V20 N5

IRIS ACCESSION NUMBER: EW009235

PUBLICATION DATE: MAY 83

TITLE: IMPROVED EFFICIENCY--WHERE DO WE BEGIN?

PERSONAL AUTHOR: OVERMYER, CORTLAND V.

DESCRIPTOR: *EFFICIENCY; *FACILITIES; *MANAGEMENT; *MICHIGAN; *MAINTENANCE; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PLANNING; *PROGRAM EVALUATION; *PERSONNEL DEVELOPMENT; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 9-10P.

ABSTRACT: DESCRIBED IS A PROGRAM TO IMPROVE THE EFFICIENCY OF THE BATTLE CREEK, MICHIGAN WASTEWATER TREATMENT FACILITY.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION - HIGHLIGHTS; V20 N5

IRIS ACCESSION NUMBER: EW009236

PUBLICATION DATE: MAY 83

TITLE: BLOWER FILTER MAINTENANCE.

PERSONAL AUTHOR: KALUSEGGER, R. B.

DESCRIPTOR: *BLOWER FILTERS; *FILTERS; *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 11-12P.

ABSTRACT: DESCRIBED ARE PROCEDURES USED TO MAINTAIN BLOWER FILTERS AT AN ACTIVATED SLUDGE WASTEWATER TREATMENT PLANT.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION - HIGHLIGHTS; V20 N5

IRIS ACCESSION NUMBER: EW009237

PUBLICATION DATE: MAY 83

TITLE: THE SI TRICKLING FILTER.

PERSONAL AUTHOR: CARNEY, WILLIAM

DESCRIPTOR: *FACILITIES; *FILTERS; *MEASUREMENT; *METRIC SYSTEM; *OPERATIONS (WASTEWATER); *TRICKLING FILTERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 12-13P.

ABSTRACT: DESCRIBED ARE CONVERSION FACTORS, HYDRAULIC LOADS, AND ORGANIC LOADS FOR SI TRICKLING FILTERS.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION - HIGHLIGHTS; V20 N5

IRIS ACCESSION NUMBER: EW009417

PUBLICATION DATE: 82

TITLE: ENVIRONMENTAL IMPACT ASSESSMENT.

DESCRIPTOR: *ASSESSMENT; *CONFERENCE PROCEEDINGS; *ENVIRONMENTAL IMPACTS; *ENVIRONMENTAL IMPACT ASSESSMENT; *EVALUATION; *MODELS; *MONITORING; *OBJECTIVES; *PLANNING; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 439P. PRICE: $59.00.

ABSTRACT: THIS BOOK IS THE PROCEEDINGS OF THE NATO ADVANCED STUDY INSTITUTE ON ENVIRONMENTAL ASSESSMENT HELD IN FRANCE IN 1981. THIS BOOK PRESENTS A COMBINATION OF CURRENT PRACTICE APPRAISAL AND RESEARCH FINDINGS RELATED TO ENVIRONMENTAL IMPACT ASSESSMENT. TOPICS INCLUDE AIMS, OBJECTIVES, SELECTED NATIONAL PROCEDURES, PLANNING, METHODS, ASSESSMENT, MONITORING, AND AUDITS.

AVAILABILITY: KLUWER BOSTON, INC., 190 OLD DERBY STREET, HINGHAM, MA 02043

IRIS ACCESSION NUMBER: EW009418

PUBLICATION DATE: 83

TITLE: OPERATION OF COMPLEX WATER SYSTEMS.

PERSONAL AUTHOR: GUGGINO, E.; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *COSTS; *GROUNDWATER; *OPERATIONS (WATER); *PLANNING; *RESERVOIRS; *SIMULATION; *SYSTEMS ANALYSIS; *WATER QUALITY; *WATER TREATMENT; *WATER SYSTEMS

DESCRIPTIVE NOTE: 524P. PRICE: $69.50.

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS OF THE NATO ADVANCED STUDY INSTITUTE HELD IN ERICE, SICILY, ITALY IN 1981. THE BOOK DEALS WITH APPROACHES FOR DESCRIBING, PLANNING, AND PRACTICE WITHIN COMPLEX WATER SYSTEMS. THE CHAPTERS COVER A WIDE SPECTRUM OF TOPICS INCLUDING GROUNDWATER, WATER QUALITY, INSTITUTIONS, COST-SHARING, RESERVOIR OPERATION, AND INTERNATIONAL NEGOTIATIONS. DISCUSSIONS INCLUDE SYSTEMS ANALYSIS, OPERATIONS RESEARCH, SIMULATION MODELING, DESCRIPTIONS OF PRACTICES, AND CASE STUDIES.

AVAILABILITY: KLUWER BOSTON, INC., 190 OLD DERBY STREET, HINGHAM, MA 02043

IRIS ACCESSION NUMBER: EW009419

PUBLICATION DATE: 82

TITLE: WATER RESOURCES AND LAND-USE PLANNING.

PERSONAL AUTHOR: LACONTE, P.; HAIMES, Y. Y.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DECISION MAKING; EROSION; GROUNDWATER; LAND RECLAMATION; *LAND USE; *LEGISLATION; *PLANNING; URBAN DEVELOPMENT; *WATER RESOURCES; *WATER SUPPLY; WATER TREATMENT; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 470P. PRICE: $57.50.

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS OF THE NATO ADVANCED STUDY INSTITUTE HELD IN BELGIUM IN 1978. THIS VOLUME COVERS THE SCIENTIFIC AND TECHNICAL, LEGAL AND INSTITUTIONAL, AND POLICY DECISION MAKING ASPECTS OF WATER RESOURCES AND LAND-USE PLANNING. INCLUDED ARE SUCH TOPICS AS WATER QUALITY, GROUNDWATER, IRRIGATION, SOIL EROSION, LAND RECLAMATION, AND URBAN DEVELOPMENT.

AVAILABILITY: KLUWER BOSTON, INC., 190 OLD DERBY STREET, HINGHAM, MA 02043

IRIS ACCESSION NUMBER: EW009542

PUBLICATION DATE: SUM 83

TITLE: PRESSURE PIPE EXTERNAL LOAD DESIGN.

PERSONAL AUTHOR: ECKSTEIN, DAVE

DESCRIPTOR: *DESIGN; *EXTERNAL LOAD DESIGN; *LOAD DESIGN; *SEWERS; *PIPES

DESCRIPTIVE NOTE: 5P.

ABSTRACT: THIS ARTICLE PROVIDES A PRESENTATION ON EXTERNAL LOAD DESIGN FOR PRESSURE PIPE. DUCTILE IRON AND PVC PIPE ARE USED AS EXAMPLES.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V6 N2

IRIS ACCESSION NUMBER: EW009543

PUBLICATION DATE: SUM 83

TITLE: BREAKING THE NOT-SO-SECRET PVC PIPE CODE.

PERSONAL AUTHOR: WALKER, ROBERT

DESCRIPTOR: *CODES; *MARKING REQUIREMENTS; *PVC PIPE; *PIPE; *PIPE CHARACTERISTICS

DESCRIPTIVE NOTE: 6-7P.

ABSTRACT: THIS ARTICLE EXPLAINS THE IDENTIFICATION MARKINGS ON PVC PIPE. IT ALSO EXPLAINS WHAT MANY OF THE MARKINGS MEAN.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V6 N2

IRIS ACCESSION NUMBER: EW009544

PUBLICATION DATE: SUM 83

TITLE: TI 58/59 POCKET CALCULATOR PROGRAM FOR SUPPORT SPACING.

PERSONAL AUTHOR: NESBEITT, WILLIAM D.
DESCRIPTOR: *CALCULATOR APPLICATIONS; *CALCULATOR PROGRAMS; *PIPE; *PVC PIPE; *SUPPORTS; *UNDERGROUND SUPPORTS

DESCRIPTIVE NOTE: 8P.

ABSTRACT: THIS ARTICLE PROVIDES A CALCULATOR PROGRAM TO DETERMINE THE PROPER SPACING FOR SUPPORTS FOR UNDERGROUND APPLICATION OF PVC PIPE. THE PROGRAM IS DESIGNED FOR A TI 58/59.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V6 N2

IRIS ACCESSION NUMBER: EW009963

PUBLICATION DATE: 83

TITLE: TREATMENT OF WATER BY GRANULAR ACTIVATED CARBON.

PERSONAL AUTHOR: MCGUIRE, MICHAEL J.; SUFFET, I. H.

DESCRIPTOR: *ACTIVATED CARBON; *CASE HISTORIES; *ADSORPTION; *GRANULAR ACTIVATED CARBON; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 600P. PRICE: $61.95.

ABSTRACT: THIS PUBLICATION IS BASED ON A SYMPOSIUM SPONSORED BY THE ENVIRONMENTAL DIVISION OF THE AMERICAN CHEMICAL SOCIETY. THE BOOK UPDATES THE FIELD FOR ACTIVATED CARBON ADSORPTION FOR WATER TREATMENT APPLICATION. THE CONTENTS DEAL WITH THEORETICAL MODELING, COMPETITIVE ABSORPTION, BIOLOGICAL/ADSORPTION INTERACTIONS, AND CASE HISTORIES.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, DISTRIBUTION OFFICE DEPT. 17, 1155 SIXTEENTH STREET, N.W., WASHINGTON, DC 20036

IRIS ACCESSION NUMBER: EW009967

PUBLICATION DATE: AUG 83

TITLE: ROOT OUT THOSE SEWER CLOGS.

DESCRIPTOR: *COSTS; *MAINTENANCE; *PREVENTIVE MAINTENANCE; *ROOT CONTROL; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 27-28P.

ABSTRACT: DESCRIBED IS A CONTRACT CHEMICAL ROOT CONTROL TREATMENT SERVICE THAT PROVIDED AN 18-MONTH GUARANTEE AGAINST ROOT PLUG-UPS AND REDUCED LONG TERM SEWER MAINTENANCE WORK AND COSTS.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N8

IRIS ACCESSION NUMBER: EW009968
PUBLICATION DATE: AUG 83

TITLE: SEVEN STEPS TO MORE EFFECTIVE TRAINING.

DESCRIPTOR: *DART; *EFFECTIVENESS; *PERFORMANCE EVALUATION; *PROGRAM EVALUATION; *TRAINING

DESCRIPTIVE NOTE: 41-42P.

ABSTRACT: MANAGERS OFTEN BALK AT USING TRAINING AS A PRODUCTIVITY IMPROVEMENT TOOL, BECAUSE THEY LACK AN EFFECTIVE WAY TO JUSTIFY THE NEED OR QUANTIFY THE RESULTS. THE DEFICIENCY ANALYSIS REVIEW TECHNIQUE (DART) PROVIDES SEVEN STEPS TO MORE EFFECTIVE TRAINING.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N8

IRIS ACCESSION NUMBER: EW009969

PUBLICATION DATE: AUG 83

TITLE: FOUND WATER AT 200 GALLONS/YARD.

DESCRIPTOR: *DREDGING; *RESERVOIRS; *SEDIMENTS; *VIRGINIA; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 58-59P.

ABSTRACT: A SMALL DREDGE REMOVED MORE THAN 30,000 CUBIC YARDS OF ACCUMULATED WATER TREATMENT SLUDGE FROM A RESERVOIR TO CLEAR THE PLANT INTAKE AND RESTORE STORAGE CAPACITY.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N8

IRIS ACCESSION NUMBER: EW009999

PUBLICATION DATE: AUG 83

TITLE: TRAINING DESIGN BY DESIGN: WHY WE COME BACK TO RECURSIVENESS.

PERSONAL AUTHOR: HIEBERT, MURRAY B.; SMALLWOOD, W. NORMAN

DESCRIPTOR: *INSTRUCTION; *MANAGEMENT; *RECURSIVE TRAINING; *TRAINING

DESCRIPTIVE NOTE: 31-35P.

ABSTRACT: WHEN A TRAINING PROGRAM'S PROCESS REFLECTS THE PROGRAM'S CONTENT, IT IS SAID TO BE RECURSIVE. THE ARTICLE INCLUDES A RECURSIVE INSTRUCTIONAL DESIGN, SOME RECURSIVE ELEMENTS FOR THREE TYPICAL TRAINING TOPICS, AND SOME EXAMPLES OF RECURSIVE TRAINING.

AVAILABILITY: TRAINING & DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010000
PUBLICATION DATE: AUG 83

TITLE: THE MANAGEMENT OF UNLEARNING: EXPLODING THE "CLEAN STATE" FALLACY.

PERSONAL AUTHOR: NEWSTROM, JOHN W.

DESCRIPTOR: *BEHAVIOR; *LEARNING; *TRAINING; *UNLEARNING

DESCRIPTIVE NOTE: 36-39P.

ABSTRACT: WHETHER THE BARRIER TO LEARNING IS PREEXISTING KNOWLEDGE OR PSYCHOLOGICAL RESISTANCE, IT MUST BE CONFRONTED AND MANAGED BEFORE EFFECTIVE NEW LEARNING CAN TAKE PLACE. INCLUDED IN THE ARTICLE ARE (1) A TYPOLOGY OF LEARNING SITUATIONS, AND (2) POSITIVE, NEGATIVE, AND NEUTRAL STRATEGIES.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010001

PUBLICATION DATE: AUG 83

TITLE: THERAPEUTIC LISTENING--A COMMUNICATION TOOL.

PERSONAL AUTHOR: MORGAN, GLEN M.

DESCRIPTOR: *BLOCKING TECHNIQUES; *COMMUNICATION; *ENCOURAGEMENT TECHNIQUES; *LISTENING; *MANAGEMENT; *THERAPEUTIC LISTENING

DESCRIPTIVE NOTE: 44-46P.

ABSTRACT: TRAINING IN ENCOURAGEMENT AND BLOCKING TECHNIQUES GOES BEYOND BASIC LISTENING CONCEPTS TO DEVELOP MORE PRODUCTIVE MANAGER-EMPLOYEE RELATIONSHIPS. SEVERAL EXAMPLES ARE PROVIDED.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010002

PUBLICATION DATE: AUG 83

TITLE: THE NUMBERS GAME: PUTTING VALUE ON HUMAN RESOURCE DEVELOPMENT.

PERSONAL AUTHOR: GALAGAN, PATRICIA

DESCRIPTOR: *DESIGN; *EVALUATION; *HUMAN RESOURCE DEVELOPMENT; *INSTRUCTION; *TRAINING

DESCRIPTIVE NOTE: 48-51P.

ABSTRACT: AFTER YEARS OF BEING A CRITICAL ISSUE, AND IN SPITE OF SCORES OF METHODS AND MODELS, HRD PROFESSIONALS ARE STILL SEEKING WAYS TO MAKE EVALUATION MEANINGFUL. A MATRIX IS PROVIDED TO AID THE DESIGN AND EVALUTION OF TRAINING.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010003

PUBLICATION DATE: AUG 83

TITLE: WHAT CAN TRAINERS LEARN FROM EDUCATORS ABOUT EVALUATING MANAGEMENT TRAINING?

PERSONAL AUTHOR: GALVIN, JAMES C.

DESCRIPTOR: *CIPP MODEL; *CURRICULUM DEVELOPMENT; *EVALUATION; *INSTRUCTION; *MANAGEMENT; *TRAINING

DESCRIPTIVE NOTE: 52-57P.

ABSTRACT: PROFESSIONAL EDUCATORS DEVELOPED A FLEXIBLE EVALUATION MODEL THAT CAN BE MORE USEFUL FOR MANAGEMENT TRAINING PROGRAMS THAN ARE TECHNICALLY ORIENTED METHODS. THE CIPP MODEL (CONTEXT, INPUT, PROCESS, AND PRODUCT) IS DESCRIBED.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010004

PUBLICATION DATE: AUG 83

TITLE: THE SUCCESS CASE: A LOW-COST, HIGH-YIELD EVALUATION.

PERSONAL AUTHOR: BRINKERHOFF, ROBERT O.

DESCRIPTOR: *CASE STUDIES; *DATA ANALYSIS; *EVALUATION; *INTERVIEWS; *SUCCESS-CASE METHOD; *TRAINING

DESCRIPTIVE NOTE: 58-61P.

ABSTRACT: WHEN A TRAINING AND DEVELOPMENT EFFORT DOESN'T LEND ITSELF WELL TO TRADITIONAL EVALUATION METHODS, THE SUCCESS-CASE METHOD MAY TELL YOU WHAT YOU NEED TO KNOW. SOME SUGGESTIONS FOR OBTAINING AND ANALYZING DATA ARE INCLUDED.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010005

PUBLICATION DATE: AUG 83

TITLE: UNDERSTANDING MISUNDERSTANDING: A KEY TO EFFECTIVE COMMUNICATION.

PERSONAL AUTHOR: JOHNSON, JOHN R.

DESCRIPTOR: *COMMUNICATION; *LISTENING; *READING; *SPEAKING; *UNDERSTANDING; *WRITING

DESCRIPTIVE NOTE: 62-68P.
ABSTRACT: BY UNDERSTANDING THE DYNAMIC INTERRELATIONSHIPS BETWEEN THOUGHTS AND WORDS, WE CAN BETTER UNDERSTAND HOW AND WHY CERTAIN OF OUR MESSAGES ARE UNCLEAR. TWO FIGURES ARE USED TO DESCRIBE RELATIONSHIPS BETWEEN LISTENING, READING, SPEAKING, AND WRITING AND PROCESSES INVOLVED. ALSO INCLUDED IS A DISCUSSION OF PROCESSES INVOLVED DEVELOPING CLEARER MESSAGES.

AVAILABILITY: TRAINING & DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010006

PUBLICATION DATE: AUG 83

TITLE: LEARNING: DOING WHAT CAN COME NATURALLY.

PERSONAL AUTHOR: LIPPITT, GORDON

DESCRIPTOR: *ADULT LEARNERS; *INSTRUCTION; *LEARNING; *LEARNING FACILITATION

DESCRIPTIVE NOTE: 70-73P.

ABSTRACT: LEARNING IS A VARIED, EXCITING, AND ARTISTIC EXPERIENCE. THE AUTHOR BELIEVES THAT LEARNING IS NOT AS COMPLEX AS SOME PEOPLE TEND TO MAKE IT. LEARNING, HOWEVER, CAN BE A SOMEWHAT DIFFERENT PROCESS FOR CHILDREN AND ADULTS. THE AUTHOR PROVIDES EXAMPLES OF HOW ADULTS LEARN AND HOW LEARNING CAN BE FACILITATED.

AVAILABILITY: TRAINING & DEVELOPMENT JOURNAL; V37 N8

IRIS ACCESSION NUMBER: EW010119

PUBLICATION DATE: MAY 83

TITLE: INFORMATION ON OCEAN DISPOSAL OF MUNICIPAL AND INDUSTRIAL WASTE.

DESCRIPTOR: *ECONOMICS; *ENVIRONMENT; *INFORMATION NEEDS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *MUNICIPAL WASTES; *OCEANS; *RESEARCH; *SEWAGE; *TRENDS; *WASTE DISPOSAL; *WATER QUALITY

DESCRIPTIVE NOTE: 33P.

ABSTRACT: THIS REPORT WAS DESIGNED TO ADDRESS CURRENT AND FUTURE USES OF THE OCEANS FOR SEWAGE SLUDGE AND INDUSTRIAL WASTE DISPOSAL. THE REPORT ALSO CONSIDERS INFORMATION NEEDS TO MANAGE THE OCEAN DUMPING PROGRAM. THE REPORT INCLUDES A LISTING OF ORGANIZATIONS CONTACTED DURING THE REVIEW AND A BIBLIOGRAPHY OF MATERIALS USED IN PREPARING THE REPORT.

AVAILABILITY: U.S. GENERAL ACCOUNTING OFFICE, DOCUMENT HANDLING AND INFORMATION SERVICES FACILITY, P. O. BOX 6015, GAITHERSBURG, MD 20760

IRIS ACCESSION NUMBER: EW010122
PUBLICATION DATE: APR 83

TITLE: ENVIRONMENTAL BODY COUNT: CLARIFYING THE NUMBERS GAME CONCERNING UNCONTROLLED HAZARDOUS WASTE SITES IN THE UNITED STATES.

PERSONAL AUTHOR: HURLEY, MIKE

DESCRIPTOR: *EMERGNECY RESPONSE AND REMEDIAL INFORMATION SYSTEM; *ERRIS; *HAZARDOUS WASTES; *HAZARDOUS WASTE SITES; *POLLUTION; *NATIONAL PRIORITIES LIST; *SURVEYS

DESCRIPTIVE NOTE: 18P.

ABSTRACT: THIS PUBLICATION HAS DIFFERENT SETS OF NUMBERS REGARDING UNCONTROLLED HAZARDOUS WASTE SITE PROBLEMS IN THE UNITED STATES. THE NATIONAL PRIORITIES LIST, THE ERRIS INVENTORY, AND OTHER ESTIMATES ARE CONSIDERED. SOME INFORMATION IS GIVEN ON NUMBERS OF SITES BY STATES. SEVERAL REFERENCES ARE ALSO CITED.

AVAILABILITY: CITIZENS FOR CITIZENS, INC., 19 SPRING STREET, TAUNTON, MA 02780

IRIS ACCESSION NUMBER: EW010172

PUBLICATION DATE: MAR 83

TITLE: ADVANCED BIOLOGICAL TREATMENT OF MUNICIPAL WASTEWATER THROUGH AQUACULTURE.

PERSONAL AUTHOR: HALL, DEMPSEY H.; SHELTON, JOEL E.

DESCRIPTOR: *ADVANCED WASTEWATER TREATMENT; *AQUACULTURE; *BIOLOGICAL TREATMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PB83-159319.

ABSTRACT: THIS RESEARCH PROJECT WAS INITIATED WITH THE OVERALL OBJECTIVES OF (A) ASSESSING THE POTENTIAL OF AQUACULTURE AS A SUITABLE MEANS OF TREATING MUNICIPLE SEWAGE IN A MID-TEMPERATE LATITUDE ON AN ANNUAL BASIS; (B) PROVIDING A SET OF DESIGN CRITERIA FOR IMPLEMENTATION OF AQUACULTURE AS AN ADVANCED WASTEWATER TREATMENT METHOD, AND (C) ACHIEVING EFFLUENT QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010173

PUBLICATION DATE: MAR 83

TITLE: PERFORMANCE CHARACTERISTICS OF PACKAGE WATER TREATMENT PLANTS.

PERSONAL AUTHOR: MORAND, JAMES M.; YOUNG, MATTHEW J.

DESCRIPTOR: DRINKING WATER; *EVALUATION; *FACILITIES; MAINTENANCE; *OPERATIONS (WATER); *PACKAGE TREATMENT PLANTS; *PERFORMANCE EVALUATION; TRAINING; *WATER TREATMENT

DESCRIPTIVE NOTE: PB83-83-161618.

ABSTRACT: THE QUALITY OF WATER PRODUCED BY PACKAGE WATER TREATMENT PLANTS WAS INVESTIGATED IN A STUDY CONDUCTED ONSITE AT SIX SELECTED FACILITIES. THE SIX PLANTS WERE IN YEAR ROUND OPERATION, USED SURFACE WATER SOURCES, AND SERVED SMALL POPULATIONS. IT WAS CONCLUDED THAT PLANTS MANNED BY COMPETENT OPERATORS CAN READILY TREAT THE TURBIDITY AND BACTERIA OF SURFACE WATERS THAT HAVE FAIRLY CONSISTENT QUALITY. THESE PLANTS, HOWEVER, REQUIRE SUBSTANTIAL PERSONNEL TIME AND REQUIRE MAINTENANCE AND OPERATIONAL SKILL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010174

PUBLICATION DATE: APR 83

TITLE: DRINKING WATER COST EQUATIONS.

PERSONAL AUTHOR: DORSEY, PAUL; CLARK, ROBERT M.

DESCRIPTOR: *CONSTRUCTION; *COSTS; *COST ESTIMATES; *DRINKING WATER; *MAINTENANCE; *OPERATIONS (WATER); *UNIT PROCESSES; *WATER RATES; *WATER TREATMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: PB83-181826.

ABSTRACT: A COMPUTER PROGRAM WAS WRITTEN TO PROVIDE THE CAPABILITY FOR EASY COST CALCULATION, AND EXAMPLES HAVE BEEN DEVELOPED IN THE FULL REPORT. THE PROJECT SUMMARY DESCRIBES THE VARIABLES AND PROCEDURES USED FOR DEVELOPING WATER COSTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010175

PUBLICATION DATE: JAN 83

TITLE: CHARACTERISTICS AND TREATABILITY OF URBAN RUNOFF RESIDUALS.

PERSONAL AUTHOR: CARR, DONALD J.; AND OTHERS

DESCRIPTOR: *COSTS; *LIME STABILIZATION; *LANDFILLS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SURFACE RUNOFF; *URBAN AREAS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PB83-133561.

ABSTRACT: REPORTED IS A STUDY ON THE TREATABILITY AND CHARACTERISTICS OF URBAN RUNOFF. BASED ON THE RESULTS OF THIS STUDY, THE MOST COST-EFFECTIVE TREATMENT FOR HANDLING AND DISPOSAL OF URBAN STORMWATER RUNOFF RESIDUALS IS GRAVITY THICKENING FOLLOWED BY LIME STABILIZATION AND LANDSPREADING, OR DIRECT LANDFILLING. COSTS ARE ALSO REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010194

PUBLICATION DATE: 81

TITLE: HEAT TREATMENT. SLUDGE TREATMENT AND DISPOSAL COURSE #166.

DESCRIPTOR: *AUDIOVISUAL AIDS; *HEAT TREATMENT; *INSTRUCTIONAL MATERIALS; *PORTEOUS HEAT TREATMENT; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLIDES; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: RENTAL PRICE: $15.00. 53 SLIDES, 15-MINUTE TAPE AND SCRIPT.

ABSTRACT: DESCRIBES THE PORTEOUS HEAT TREATMENT METHOD AND COMPARES IT TO THE ZIMPRO WET AIR OXIDATION PROCESS. THE THEORY OF HEAT TREATMENT, SYSTEM COMPONENTS AND FUNCTIONS, AND CONCEPTS OF OPERATION ARE COVERED.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: LINN-BENTON COMMUNITY COLLEGE.

IRIS ACCESSION NUMBER: EW010195

PUBLICATION DATE: 81

TITLE: BELT FILTRATION. SLUDGE TREATMENT AND DISPOSAL COURSE #166.

DESCRIPTOR: *AUDIOVISUAL AIDS; *BELT FILTRATION; *DEWATERING; *FILTRATION; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *SLIDES; *SLUDGE; *POSTSECONDARY EDUCATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: RENTAL PRICE: $15.00. 58 SLIDES, 16 MINUTE TAPE AND SCRIPT.

ABSTRACT: AN INTRODUCTION TO THE FUNDAMENTAL PRINCIPLES OF BELT FILTER OPERATION AND DISCUSSES CHEMICAL CONDITIONING EFFECTS ON SLUDGE CHARACTERISTICS. THE DIFFERENT ZONES OF DEWATERING ARE DETAILED. TYPICAL COMPONENTS AND FUNCTIONS ARE FOLLOWED BY A DISCUSSION OF PROCESS CONTROL PARAMETERS AND SAFETY CONSIDERATIONS. PREREQUISITES TO BELT FILTRATION ARE PLANNING CONSIDERATIONS, SLUDGE CHARACTERISTICS AND SLUDGE CONDITIONING MODULES. PRESENTATION OF THE LAB PROCEDURES MODULE MAY BE USED TO CLARIFY REFERENCES MADE TO

LAB TESTING.
AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: LINN BENTON COMMUNITY COLLEGE.

IRIS ACCESSION NUMBER: EW010216

PUBLICATION DATE: 83

TITLE: PLANNING SMALL COMMUNITY WASTEWATER MANAGEMENT.

PERSONAL AUTHOR: HUDSON, JAMES F.; DEESE, PATRICIA L.

DESCRIPTOR: COMMUNITY PROFILES; ENVIRONMENT; FACILITIES; *MANAGEMENT; *NEEDS; *PLANNING; *PROBLEM IDENTIFICATION; *RURAL AREAS; TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 168-182P.

ABSTRACT: THIS PAPER PRESENTS PROCEDURES FOR PLANNING WASTEWATER MANAGEMENT FACILITIES FOR SMALL COMMUNITIES AND IS DIRECTED AT AREAS WITH POPULATIONS OF UNDER 10,000. THE PAPER PRESENTS INFORMATION AND TECHNIQUES FOR RECOGNIZING AND EVALUATING WASTEWATER MANAGEMENT PROBLEMS FREQUENTLY FACED BY SMALL COMMUNITIES AND FOR PLANNING THE RANGE OF FACILITIES WHICH WILL SOLVE THOSE PROBLEMS, GIVING DUE CONSIDERATION TO COSTS, COMMUNITY CHARACTERISTICS, AND GROWTH MANAGEMENT.

AVAILABILITY: THE ENVIRONMENTAL PROFESSIONAL; V5 N2

IRIS ACCESSION NUMBER: EW010221

PUBLICATION DATE: OCT 83

TITLE: DENVER'S FOOTHILLS PROJECT: ENERGY EFFICIENCY IN ACTION.

PERSONAL AUTHOR: LAYNE, JACK E.; ECKENBERG, WILLIAM G.

DESCRIPTOR: *COLORADO; *COSTS; *CONSERVATION; *ELECTRIC POWER; *ENERGY; *ENERGY CONSERVATION; *FACILITIES; *WATER DISTRIBUTION; *WATER TREATMENT

DESCRIPTIVE NOTE: 487-491P.

ABSTRACT: DESCRIBED IS THE DENVER, COLORADO FOOTHILLS WATER TREATMENT COMPLEX. MORE THAN ENOUGH ELECTRIC ENERGY CAN BE GENERATED TO OPERATE THE TREATMENT PLANT ONCE A HYDROTURBINE IS INSTALLED IN 1984. SURPLUS ELECTRICITY WILL THEN BE AVAILABLE AT CERTAIN TIMES FOR SALE TO AN ELECTRIC UTILITY. THE ELEVATION OF THE TREATMENT PLANT ALLOWS GRAVITY FEED TO MOST OF THE CITY'S DISTRIBUTION SYSTEM SAVING ABOUT $1 MILLION ANNUALLY IN PUMPING COSTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010222
PUBLICATION DATE: OCT 83

TITLE: ENERGY EFFICIENCY THROUGH PIPE DESIGN.

PERSONAL AUTHOR: WALSKI, THOMAS M.

DESCRIPTOR: *DESIGN; *ENERGY EFFICIENCY; *FLOW MEASUREMENT; *PIPES; *WATER PIPES

DESCRIPTIVE NOTE: 492-495P.

ABSTRACT: DESCRIBED IS A SIMPLIFIED METHOD OF DETERMINING PROPER PIPE SIZES THAT ENABLES ENGINEERS TO INCORPORATE ENERGY COSTS AND AVERAGE FLOW IN ADDITION TO PEAK FLOW. PROCEDURES FOR USING THE METHOD ARE DESCRIBED, AND NOMOGRAMS, USING NOMINAL PIPE DIAMETERS, ARE GIVEN. THIS METHOD CIRCUMVENTS THE NEED FOR DETAILED ANALYSES IN MANY CASES AND CAN SAVE TIME AND EFFORT IN DESIGNING ENERGY-EFFICIENT PIPELINES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010223

PUBLICATION DATE: OCT 83

TITLE: ENERGY-SAVING PUMP SELECTION.

PERSONAL AUTHOR: ALDWORTH, GEORGE A.

DESCRIPTOR: *CANADA; *DESIGN; *EFFICIENCY; *ENERGY CONSERVATION; *MOTORS; *PUMPS; *WATER DISTRIBUTION; *WATER PUMPS; *WATER SUPPLY.

DESCRIPTIVE NOTE: 496-501P.

ABSTRACT: THIS ANALYSIS REPORTS HOW PUMPING SCHEMES WERE SELECTED FOR THREE CANADIAN WATER SUPPLY SYSTEMS. INCLUDED IS A SERIES OF PUMP CURVES THAT INDICATE THE COMPARATIVE OPERATING RANGE AND EFFICIENCY OF THE ALTERNATIVES CONSIDERED FOR EACH INSTALLATION. DUAL-SPEED, 2-WINDING MOTORS MET THE PUMPING REQUIREMENTS OF THE TWO SYSTEMS MORE EFFICIENTLY THAN CONSTANT-SPEED MOTORS. CONSTANT-SPEED CENTRIFUGAL PUMPS WERE SELECTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010224

PUBLICATION DATE: OCT 83

TITLE: OPTIMIZING PUMP OPERATING COSTS.

PERSONAL AUTHOR: CLINGENPEEL, WILLIAM H.

DESCRIPTOR: *CASE STUDIES; *COSTS; *ELECTRIC RATES;

*ENERGY; *ENERGY CONSERVATION; *HYDRAULICS; *MANAGEMENT; *OPERATIONS (WATER); *PUMPS; *WATER UTILITIES; *WATER SUPPLY; *VIRGINIA

DESCRIPTIVE NOTE: 502-509P.

ABSTRACT: DRAMATIC SAVINGS WERE REALIZED FOR TWO WATER UTILITIES WHEN PREVAILING ELECTRIC RATES WERE CONSIDERED IN CONJUNCTION WITH DETAILED HYDRAULIC PERFORMANCE ANALYSES. CASE STUDIES OF TWO VIRGINIA WATER UTILITIES EXEMPLIFY THE MANAGEMENT OF PUMPING OPERATIONS THROUGH ANALYSIS AND IMPLEMENTATION OF ENERGY CONSERVATION MEASURES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010225

PUBLICATION DATE: OCT 83

TITLE: IMPROVING ENERGY EFFICIENCY THROUGH COMPUTER MODELING.

PERSONAL AUTHOR: LACKOWITZ, GEORGE W.; PETRETTI, PAUL J.

DESCRIPTOR: *CASE HISTORIES; *COSTS; *ENERGY EFFICIENCY; *MANAGEMENT; *OPERATIONS (WATER); *PUMPS; *SIMULATIONS; *WATER SUPPLY; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 510-515P.

ABSTRACT: DISCUSSED IS A CASE HISTORY OF IMPROVING THE ENERGY EFFICIENCY OF A WATER SYSTEM'S PUMPING OPERATIONS BY MEANS OF (1) PUMP TESTING, (2, TESTING VALVE SETTINGS, AND (3) SIMULATING SYSTEM BEHAVIOR.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010226

PUBLICATION DATE: OCT 83

TITLE: FUNDAMENTAL CHARACTERISTICS OF WATER TREATMENT PLANT SLUDGE.

PERSONAL AUTHOR: KNOCKE, WILLIAM R.; WAKELAND, DOUGLAS L.

DESCRIPTOR: *DEWATERING; *FILTRATION; *FILTRATION RATES; *FLOC; *SLUDGE; *VIRGINIA; *WATER TREATMENT

DESCRIPTIVE NOTE: 516-523P.

ABSTRACT: WATER SLUDGE SAMPLES OBTAINED FROM SEVERAL WATER TREATMENT PLANTS IN VIRGINIA WERE USED TO STUDY FLOC MICROPROPERTIES AND THEIR IMPACT ON SLUDGE FILTRATION RATES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N10

IRIS ACCESSION NUMBER: EW010235

PUBLICATION DATE: OCT 83

TITLE: SOFTWARE REACHES INTO THE WATER BUSINESS.

PERSONAL AUTHOR: DONOHUE, EDWARD J.

DESCRIPTOR: *BUDGETS; *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MANAGEMENT; *PLANNING; *UTILITIES; *WATER RATES; *WATER SUPPLY

DESCRIPTIVE NOTE: 24-26P.

ABSTRACT: SUCCESSFUL FINANCIAL OPERATIONS IN THE WATER SUPPLY BUSINESS INVOLVE A NUMBER OF IMPORTANT ELEMENTS. BUDGETING, SETTING WATER RATES, AND THE INTEGRATION OF SUBSYSTEMS ARE ALL IMPORTANT ACTIVITIES. MICROCOMPUTERS AND NEW SOFTWARE PROVIDE USEFUL TOOLS FOR ACCOMPLISHING THESE TASKS.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N11

IRIS ACCESSION NUMBER: EW010236

PUBLICATION DATE: OCT 83

TITLE: WHY CALIBRATE WATER DISTRIBUTION SYSTEM MODELS?

PERSONAL AUTHOR: WALSKI, THOMAS M.

DESCRIPTOR: *DATA COLLECTION; *MANAGEMENT; *MODELS; *PLANNING; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 27-28P.

ABSTRACT: WATER DISTRIBUTION MODELS NEED TO BE CALIBRATED TO PROVIDE RELIABLE INFORMATION. PROCEDURES TO CHECK DATA ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N11

IRIS ACCESSION NUMBER: EW010237

PUBLICATION DATE: OCT 83

TITLE: TIGHT EFFLUENT SPECS MET WITH DIGITAL CONTROL.

PERSONAL AUTHOR: ROBBINS, MILLARD H., JR.

DESCRIPTOR: *AUTOMATION; *COMPUTER APPLICATIONS; *DIGITAL CONTROLS; *EFFLUENTS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *STANDARDS; *VIRGINIA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30-31,34,36P.

ABSTRACT: DESCRIBED IS A NEW ADVANCED WASTEWATER TREATMENT PLANT IN VIRGINIA WHICH MEETS ITS WATER RECLAMATION GOALS WITH THE AID OF A DIGITAL COMPUTER FOR CONTROLLING VARIOUS PROCESSES.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N11

IRIS ACCESSION NUMBER: EW010238

PUBLICATION DATE: OCT 83

TITLE: TURNING SLUDGE INTO SAVINGS.

PERSONAL AUTHOR: MARTIN, WILLIAM J.; JACOBS, AL

DESCRIPTOR: *AGRICULTURE; *COLORADO; *COSTS; *ECONOMICS; *FERTILIZER; *LAND APPLICATION; *LAND USE; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 38-39P.

ABSTRACT: DESCRIBED IS A SLUDGE APPLICATION PROGRAM IN THE DENVER AREA THAT IS WINNING THE APPROVAL OF FARMERS, AND SAVING MONEY FOR LOCAL RESIDENTS.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N11

IRIS ACCESSION NUMBER: EW010239

PUBLICATION DATE: OCT 83

TITLE: BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL.

PERSONAL AUTHOR: ANDERSON, GEORGE D.

DESCRIPTOR: *BACKFLOW; *CROSS-CONNECTIONS; *DESIGN; *EQUIPMENT; *MAINTENANCE; *MANAGEMENT; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 44,46,49-50P.

ABSTRACT: THIS ARTICLE DESCRIBES SOME OF THE TERMS, PROBLEMS, AND PROTECTION DEVICES RELATED TO BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL IN WATER SUPPLY.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N11

IRIS ACCESSION NUMBER: EW010240

PUBLICATION DATE: SEP 83

TITLE: THE BENCH SHEET - SPECIAL ISSUE #4.

DESCRIPTOR: *ACTIVATED SLUDGE; *ANALYTICAL TECHNIQUES; *BOD; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SURVEYS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1-8P.

ABSTRACT: THIS ISSUE OF THE BENCH SHEET DISCUSSES VARIOUS ASPECTS OF THE BOD TEST. RESULTS OF A SURVEY (N=84) REPORTS ABOUT HALF THE RESPONDERS HAD PROBLEMS WITH THE TEST. SELECTED ASPECTS OF THE SURVEY ARE DISCUSSED. IN ADDITION SOME RECOMMENDED PROCEDURES FOR THE BOD ARE PROVIDED.

AVAILABILITY: THE BENCH SHEET; SPECIAL ISSUE #4

IRIS ACCESSION NUMBER: EW010241

PUBLICATION DATE: JUL 83

TITLE: TRAINING THROUGH WORK EXPERIENCE.

PERSONAL AUTHOR: TAYLER, W. K.

DESCRIPTOR: AFRICA; *DEVELOPMENT; *FINANCES; *MAINTENANCE; NATURAL RESOURCES; *RECOMMENDATIONS; *TRAINING; *SUDAN; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 9-11P.

ABSTRACT: THE AUTHOR ARGUES THAT WATER DEVELOPMENT IN SOUTHERN SUDAN HAS BEEN UNSUCCESSFUL DUE TO LACK OF FINANCE AND TRAINED STAFF AND OUTLINES THE STEPS BEING TAKEN TO REMEDY THIS.

AVAILABILITY: WATERLINES; V2 N1

IRIS ACCESSION NUMBER: EW010242

PUBLICATION DATE: JUL 83

TITLE: TESTING WATER SOURCES FOR SALINITY IN THE FIELD.

PERSONAL AUTHOR: HAZBUN, J. A.; MANN, H. T.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *FIELD PROCEDURES; *LABORATORY PROCEDURES; *SALINITY; *SAMPLING; *WATER QUALITY; *WATER RESOURCES; *WATER WELLS

DESCRIPTIVE NOTE: 12-13P.

ABSTRACT: DESCRIBED ARE PROCEDURES AND TESTS FOR DETERMINING SALINITY IN THE FIELD.

AVAILABILITY: WATERLINES; V2 N1

IRIS ACCESSION NUMBER: EW010243

PUBLICATION DATE: JUL 83

TITLE: ONE STEP AT A TIME: WHO'S MINIMUM EVALUATION PROCEDURE FOR WATER SUPPLY AND SANITATION PROJECTS.

DESCRIPTOR: DRINKING WATER; EVALUATION; *HEALTH EDUCATION; *PERFORMANCE EVALUATION; *PUBLIC HEALTH; *SANITATION; WASTEWATER TREATMENT; *WATER SUPPLY; WATER TREATMENT; *WATER QUALITY; WORLD PROBLEMS

DESCRIPTIVE NOTE: 19-21P.

ABSTRACT: DESCRIBED IS THE WORLD HEALTH ORGANIZATION (WHO) MINIMUM EVALUATION PROCEDURE FOR WATER SUPPLY AND SANITATION PROJECTS. THE PROCEDURE USES A SET OF INDICATORS TO DETERMINE IF THE SYSTEMS ARE FUNCTIONING, HOW MUCH THEY ARE BEING USED, AND HOW WELL THEY ARE OPERATING. METHODS USED FOR COLLECTING INFORMATION ARE LISTED.

AVAILABILITY: WATERLINES; V2 N1

IRIS ACCESSION NUMBER: EW010246

PUBLICATION DATE: 83

TITLE: MAXIMIZING BENEFITS TO HEALTH...AN APPRAISAL METHODOLOGY FOR WATER SUPPLY AND SANITATION PROJECTS.

DESCRIPTOR: *BENEFIT ANALYSIS; COSTS; DISEASES; ECONOMICS; *EVALUATION; EDUCATIONAL NEEDS; *MEASUREMENT INSTRUMENTS; *PROJECT APPRAISAL; *PUBLIC HEALTH; *SANITATION; *WATER SUPPLY; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 45P.

ABSTRACT: THIS PUBLICATION CONSIDERS ALL OF THE ASPECTS THAT MUST BE TAKEN INTO ACCOUNT IF MAXIMUM BENEFITS ARE TO RESULT FROM INVESTMENTS IN WATER SUPPLY AND SANITATION TECHNOLOGY. A METHODOLOGY IS PROPOSED WHICH PROVIDES A QUANTITATIVE RESULT TO ASSIST IN THE SELECTION OF PROJECTS WHICH HAVE THE GREATEST POTENTIAL FOR SUCCESS. THE METHODOLOGY CAN ALSO BE USED FOR THE DETECTION OF GAPS IN WATER SUPPLY AND SANITATION PROGRAMS.

AVAILABILITY: WORLD HEALTH ORGANIZATION, ENVIRONMENTAL HEALTH TECHNOLOGY AND SUPPORT UNIT, 1211 GENEVA 27, SWITZERLAND

IRIS ACCESSION NUMBER: EW010252

PUBLICATION DATE: 83

TITLE: WELDING TRAINING.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *SKILL DEVELOPMENT; *TRAINING; *VIDEOTAPES; *WELDING

DESCRIPTIVE NOTE: 12 MODULES OF INSTRUCTION--EACH MODULE INCLUDES: COLOR VIDEOTAPE (APPROXIMATELY 1 HOUR), STUDENT WORKBOOK (5 COPIES) AND INSTRUCTOR

ABSTRACT: THIS PROGRAM INCLUDES 12 MODULES OF INSTRUCTION ON WELDING. EACH MODULE INCLUDES A COLOR VIDEOTAPE, STUDENT WORKBOOK, AND AN INSTRUCTOR'S DISCUSSION GUIDE.

AVAILABILITY: INDUSTRIAL TRAINING CORPORATION, 14616 SOUTHLAWN LANE, BOX 6009, ROCKVILLE, MD 20850

IRIS ACCESSION NUMBER: EW010253

PUBLICATION DATE: 83

TITLE: CHEMISTRY TRAINING.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CHEMISTRY; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *VIDEOTAPES

DESCRIPTIVE NOTE: 11 UNITS OF INSTRUCTION EACH UNIT INCLUDES COLOR VIDEOTAPE INCLUDING AN ON-TAPE EXPERIMENT, EXERCISES AT THE END OF EACH SEGMENT, STUDENT MATERIALS INCLUDING SOLUTION TO EXPERIMENT AND EXERCISES.

ABSTRACT: THESE MATERIALS PROVIDE 11 UNITS OF INSTRUCTION RELATED TO CHEMISTRY. INCLUDED ARE UNITS ON (1) THE PARTICLE MODEL OF MATTER, (2) MIXTURES AND MECHANICAL SEPARATION, (3) THERMAL SEPARATION, (4) SEPARATION BY CRYSTALLIZATION, DISSOLUTION, AND SUBLIMATION, (5) ELEMENTS, COMPOUNDS, REACTIONS, (6) REACTIONS, MOLECULES, MOLECULAR SYMBOLS, (7) CHEMICAL BONDING, (8) CHEMICAL REACTIONS AND REACTION CONDITIONS, (9) MACROMOLECULES, POLYMERIZATION, THERMOPLASTICS, (10) FOSSIL RAW MATERIALS AND RECYCLING, AND (11) FERTILIZERS, FODDER, CROP PROTECTION PRODUCTS. EACH UNIT CONTAINS A COLOR VIDEOTAPE AND STUDENT MATERIALS.

AVAILABILITY: INDUSTRIAL TRAINING CORPORATION, 14616 SOUTHLAWN LANE, BOX 6009, ROCKVILLE, MD 20850

IRIS ACCESSION NUMBER: EW010264

PUBLICATION DATE: OCT 83

TITLE: TOWARDS COMMUNITY-MANAGED DRINKING WATER SCHEMES IN NEPAL.

PERSONAL AUTHOR: WILLIAMSON, JOHN R.

DESCRIPTOR: DESIGN; *DRINKING WATER; CONSTRUCTION; MAINTENANCE; *NEPAL; OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *RURAL AREAS; *WATER SUPPLY; WATER TREATMENT; WORLD PROBLEMS

DESCRIPTIVE NOTE: 8-13P.

ABSTRACT: DESCRIBED IS A RURAL DRINKING WATER PROJECT IN NEPAL. INCLUDED ARE DESCRIPTIONS OF WATER PROJECTS, DESIGN OF SYSTEMS, STANDARDS, CONSTRUCTION, AND MAINTENANCE.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010265

PUBLICATION DATE: OCT 83

TITLE: COMMUNITY PARTICIPATION IN ZIMBABWE.

PERSONAL AUTHOR: WALSH, SISTER PATRICIA

DESCRIPTOR: COMMUNITY PARTICIPATION; PUBLIC HEALTH; RURAL

AREAS; SANITATION; WATER SUPPLY; WATER QUALITY

DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: HIGHLIGHTED IS THE DIFFICULTY OF ENCOURAGING PEOPLE IN RURAL ZIMBABWE TO TAKE RESPONSIBILITY FOR MAINTENANCE AFTER WATER PUMPS HAD BEEN INSTALLED. DIFFICULTIES IN IMPROVING SANITATION ARE ALSO NOTED.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010266

PUBLICATION DATE: OCT 83

TITLE: WHO WILL LOOK AFTER THE VILLAGE WATER SUPPLY?

PERSONAL AUTHOR: WOOD, W. E.

DESCRIPTOR: *DRINKING WATER; *FINANCING; *MAINTENANCE; *MANAGEMENT; *PUBLIC HEALTH; *RURAL AREAS; *WATER QUALITY; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 17-20P.

ABSTRACT: THIS ARTICLE CONSIDERS ESTABLISHING, MANAGING, AND MAINTAINING VILLAGE WATER SUPPLIES IN RURAL AREAS.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010267

PUBLICATION DATE: OCT 83

TITLE: WATER FILTRATION USING RICE HULL ASH.

PERSONAL AUTHOR: BARNES, D.; MAMPITIYARACHICHI, T. R.

DESCRIPTOR: *DRINKING WATER; *FILTRATION; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *RICE HULLS; *WATER TREATMENT

DESCRIPTIVE NOTE: 21-23P.

ABSTRACT: DESCRIBED IS A STUDY OF THE USE OF RICE HULL ASH FOR WATER FILTRATION. THE MATERIAL IS READILY AVAILABLE IN MANY PARTS OF THE WORLD AND APPEARS TO BE A FEASIBLE MATERIAL.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010268

PUBLICATION DATE: OCT 83

TITLE: PROCESS AIDS FOR SLOW SAND FILTRATION.

PERSONAL AUTHOR: PARDON, MAURICIO; AND OTHERS

DESCRIPTOR: *DEVELOPING COUNTRIES; *DRINKING WATER; *FILTRATION; *OPERATIONS (WATER); *SAND FILTRATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 24-28P.

ABSTRACT: DESCRIBED IS A PROJECT WORKING TO SIMPLIFY WATER TREATMENT BY SLOW SAND FILTRATION. THE TECHNIQUE IS BEING DESIGNED FOR USE IN DEVELOPING COUNTRIES.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010269

PUBLICATION DATE: OCT 83

TITLE: SLOW SAND FILTERS IN THE SUDAN.

PERSONAL AUTHOR: BUHL-NIELSEN, ERIC

DESCRIPTOR: *DEVELOPING COUNTRIES; *DRINKING WATER; *FILTRATION; *OPERATIONS (WATER); *SAND FILTRATION; *SUDAN; *SURVEYS; *WATER TREATMENT

DESCRIPTIVE NOTE: 29-30P.

ABSTRACT: DESCRIBED IS THE USE OF SLOW SAND FILTERS IN THE SUDAN.

AVAILABILITY: WATERLINES; V2 N2

IRIS ACCESSION NUMBER: EW010270

PUBLICATION DATE: OCT 83

TITLE: WATER REUSE PROGRAM A SUCCESS AT IC FABRICATOR.

DESCRIPTOR: *COSTS; *ECONOMICS; *INDUSTRY; *INTEGRATED CIRCUITS; *RECYCLING; *REVERSE OSMOSIS; *WATER CONSERVATION; *WATER REUSE; *ULTRA-PURE WATER; *WATER TREATMENT

DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: THIS SEMICONDUCTOR MANUFACTURER SAVED $57,000 IN 1982 BY RECYCLING THE WASTEWATER FROM THE REVERSE OSMOSIS PROCESS. THIS WAS MADE POSSIBLE THROUGH THE ADOPTION OF THE COOLING WATER TREATMENT PROGRAM DETAILED IN THIS REPORT.

AVAILABILITY: ENERGY MANAGEMENT TECHNOLOGY; V7 N7

IRIS ACCESSION NUMBER: EW010271

PUBLICATION DATE: OCT 83

TITLE: OPERATIONS AND MAINTENANCE ASSURANCE SYSTEMS FOR MANAGING A WASTEWATER TREATMENT PLANT.

PERSONAL AUTHOR: WEINBERG, LEO M.; LLOYD, R. D. C.

DESCRIPTOR: *ADMINISTRATION; *MANAGEMENT; *MANAGEMENT SYSTEMS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *START-UP; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1228-1232P.

ABSTRACT: DESCRIBED IS THE OPERATIONS AND MAINTENANCE ASSURANCE AND MANAGEMENT SYSTEMS (OMAMS) PROGRAM DEVELOPED BY THE CITY OF HOUSTON AND ENVIRONMENTAL MANAGEMENT CONSULTANTS. THE PROGRAM IS DESIGNED TO PROVIDE AN OPERABLE SYSTEM FOR A WASTEWATER TREATMENT COMPLEX IN FOUR AREAS: MAINTENANCE MANAGEMENT, TRAINING, START-UP OPERATIONS, AND ADMINISTRATIVE MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010272

PUBLICATION DATE: OCT 83

TITLE: START-UP AND OPERATING CHARACTERISTICS OF AN RBC FACILITY IN A COLD CLIMATE.

PERSONAL AUTHOR: LEHMAN, PATRICK J.

DESCRIPTOR: *BIOLOGICAL CONTACTORS; *FACILITIES; *MINNESOTA; *OPERATIONS (WASTEWATER); *ROTATING BIOLOGICAL CONTACTORS; *SECONDARY TREATMENT; *START-UP; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1233-1238P.

ABSTRACT: DESCRIBED IS THE START-UP AND OPERATING CHARACTERISTICS OF A SECONDARY BIOLOGICAL TREATMENT INSTALLATION WITH ROTATING BIOLOGICAL CONTACTORS (RBC). THE FACILITY IS LOCATED IN MINNESOTA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010273

PUBLICATION DATE: OCT 83

TITLE: A MANAGEMENT APPROACH TO ENERGY COST CONTROL IN WASTEWATER UTILITIES.

PERSONAL AUTHOR: PRINDLE, WILLIAM M.; AND OTHERS

DESCRIPTOR: *COSTS; *ECONOMICS; *ENERGY; *FACILITIES; *MANAGEMENT; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1239-1243P.

ABSTRACT: ENERGY COSTS FOR THE OPERATION OF MANY FACILITIES BUILT IN THE 1970'S THREATEN THE FINANCIAL HEALTH OF MANY UTILITIES. THIS ARTICLE DESCRIBES A MANAGEMENT PLAN TO CONTROL ENERGY COSTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010274

PUBLICATION DATE: OCT 83

TITLE: LEAST COST PROCESS DESIGN FOR GRANULAR ACTIVATED CARBON ADSORBERS.

PERSONAL AUTHOR: NARBAITZ, R. M.; BENEDEK, A.

DESCRIPTOR: *ACTIVATED CARBON; *ADSORBERS; *COSTS; *GRANULAR ACTIVATED CARBON; *DESIGN; *COMPUTER APPLICATIONS; *FACILITIES; *MODELS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1244-1251P.

ABSTRACT: THE USE OF GRANULAR ACTIVATED CARBON (GAC) CONTACTORS IS EXPECTED TO INCREASE TO AID IN THE REMOVAL OF TOXIC ORGANICS. A DUAL-RATE ADSORPTION MODEL BASED ON SLOW ADSORPTION PHENOMENA CAN BE USED TO SIMULATE COLUMN PERFORMANCE AND EVALUATE COSTS OF VARIOUS TREATMENT SYSTEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010275

PUBLICATION DATE: OCT 83

TITLE: A NEW DESIGN PROCEDURE FOR WASTE STABILIZATION PONDS.

PERSONAL AUTHOR: UHLMANN, DIETRICH; AND OTHERS

DESCRIPTOR: *BOD; *DESIGN; *FACILITIES; *MODELS; *STABILIZATION PONDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1252-1255P.

ABSTRACT: THE AUTHORS BELIEVE THERE IS A NEED FOR A GENERALIZED DESIGN FOR WASTE STABILIZATION PONDS TO YIELD MORE REALISTIC RESULTS THAN THE EQUATIONS COMMONLY USED. THIS PAPER PRESENTS A DESIGN MODEL TO PREDICT THE BIOCHEMICAL REMOVAL COEFFICIENT OR TO OPTIMIZE THE RESIDENCE TIMES AND THE NUMBER OF PONDS IN SERIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010276

PUBLICATION DATE: OCT 83

TITLE: ALGAE REMOVAL BY THE OVERLAND FLOW PROCESS.

PERSONAL AUTHOR: WITHEROW, JACK L.; BLEDSOE, BERT E.

DESCRIPTOR: *ALGAE; *FACILITIES; *FACULTATIVE LAGOONS; *LAGOONS; *OVERLAND FLOW PROCESS; *OPERATIONS (WASTEWATER); *SECONDARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1256-1262P.

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO EVALUATE ALGAE REMOVAL BY THE OVERLAND FLOW PROCESS AND TO DETERMINE THE SUITABILITY OF LAGOONS FOR THE PREAPPLICATION TREATMENT. THE INVESTIGATION INDICATED THAT THE OVERLAND FLOW PROCESS PRECEDED BY A FACULTATIVE LAGOON DID NOT MEET THE SECONDARY TREATMENT LIMITS FOR TSS DURING ALGAL BLOOM PERIODS WHEN THE NUMBER OF ALGAE ARE TWO TO THREE ORDERS OF MAGNITUDE GREATER THAN USUAL.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010277

PUBLICATION DATE: OCT 83

TITLE: TREATMENT OF COAL GASIFICATION WASTEWATER WITH ANAEROBIC FILTER TECHNOLOGY.

PERSONAL AUTHOR: SUIDAN, MAKRAN R.; AND OTHERS

DESCRIPTOR: *ANAEROBIC TREATMENT; *COAL GASIFICATION; *ACTIVATED CARBON; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1263-1270P.

ABSTRACT: THIS STUDY INDICATED THAT ACTIVATED CARBON IS AN EXCELLENT MEDIUM FOR THE ANAEROBIC TREATMENT OF COAL GASIFICATION WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010278

PUBLICATION DATE: OCT 83

TITLE: FACTORS AFFECTING THE RELEASE OF TRACE METALS FROM MUNICIPAL SLUDGE ASHES.

PERSONAL AUTHOR: THEIS, THOMAS L.; PADGETT, LAWRENCE E.

DESCRIPTOR: *CHEMICAL PROPERTIES; *DEWATERING; *INCINERATION; *INORGANIC SUBSTANCES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PHYSICAL PROPERTIES; *RESEARCH REPORTS; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1271-1279P.

ABSTRACT: THE PURPOSE OF THIS RESEARCH WAS TO INVESTIGATE THE PHYSICAL AND CHEMICAL PROPERTIES OF A VARIETY OF INCINERATED MUNICIPAL SLUDGE ASHES AND THE CORRESPONDING DEWATERED SLUDGES WITH RESPECT TO THE RELEASE OF TRACE INORGANICS TO AQUEOUS SOLUTION. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010279

PUBLICATION DATE: OCT 83

TITLE: THE ROLE OF SUSPENDED PARTICLES IN ULTRAVIOLET DISINFECTION.

PERSONAL AUTHOR: QUALLS, ROBERT G.; AND OTHERS

DESCRIPTOR: *DISINFECTION; *COLIFORMS; *EFFLUENTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *ULTRAVIOLET LIGHT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1280-1285P.

ABSTRACT: THIS STUDY AIMED TO: (1) DIFFERENTIATE BETWEEN THE EFFECTS OF ABSORBED AND SCATTERED UV LIGHT; (2) EVALUATE THE EFFECTS OF EXCLUSION OF VARIOUS PARTICLE SIZES ON THE DOSE-SURVIVAL CURVES OF COLIFORM IN WASTEWATER; AND (3) DETERMINE THE EFFECTS OF MIXED-MEDIA FILTRATION IN A PILOT-SCALE UV DISINFECTION STUDY. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010280

PUBLICATION DATE: OCT 83

TITLE: FATE OF TOXIC ORGANIC COMPOUNDS IN WASTEWATER TREATMENT PLANTS.

PERSONAL AUTHOR: PETRASEK, ALBERT C.; AND OTHERS

DESCRIPTOR: *ORGANIC COMPOUNDS; *PILOT STUDIES; *PRIORITY POLLUTANTS; *PERFORMANCE EVALUATION; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1286-1296P.

ABSTRACT: THIS PAPER DISCUSSES THE RESULTS OF A PILOT PLANT SUTDY CONDUCTED BY THE MINICIPAL ENVIRONMENTAL RESEARCH LABORATORY IN CINCINNATI, OHIO. THE OBJECTIVE OF THE INVESTIGATION WAS TO QUANTIFY THE BEHAVIOR AND PARTITIONING OF THE ORGANIC PRIORITY POLLUTANTS IN CONVENTIONAL WATER POLLUTION CONTROL SYSTEMS, INCLUDING THE COLLECTION SYSTEM. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010281

PUBLICATION DATE: OCT 83

TITLE: LAKE PHOSPHORUS LOADING FROM SEPTIC SYSTEMS BY SEASONALLY PERCHED GROUNDWATER.

PERSONAL AUTHOR: GILLIOM, ROBERT J.; PATMONT, CLAYTON R.

DESCRIPTOR: *CASE STUDIES; *LAKES; *GROUNDWATER; *OPERATIONS (WASTEWATER); *PHOSPHORUS; *RESEARCH REPORTS; *SEPTIC TANKS; *WASHINGTON; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1297-1305P.

ABSTRACT: THIS CASE STUDY OF A LAKE IN THE PUGET SOUND AREA WAS UNDERTAKEN TO DETERMINE HOW PHOPHORUS IS MOVING TO LAKES FROM OLD SEPTIC SYSTEMS IN GLACIAL-TILL TERRAIN. RESULTS ARE REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010282

PUBLICATION DATE: OCT 83

TITLE: A MARINE RECREATIONAL WATER QUALITY CRITERION CONSISTENT WITH INDICATOR CONCEPTS AND RISK ANALYSIS.

PERSONAL AUTHOR: CABELLI, V. J.; AND OTHERS

DESCRIPTOR: *BEACHES; *GUIDELINES; *INDICATOR ORGANISMS; *NEW YORK; *OCEANS; *PUBLIC HEALTH; *RECREATION; *RESEARCH REPORTS; *RISK ANALYSIS; *STANDARDS; *WATER QUALITY

DESCRIPTIVE NOTE: 1306-1314P.

ABSTRACT: THIS PAPER DESCRIBES AND SUBSTANTIATES THE DERIVATION OF GUIDELINES AND STANDARDS BASED ON ACCEPTABLE RISK FOR RECREATIONAL USE OF WATER IN THE NEW YORK AREA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N10

IRIS ACCESSION NUMBER: EW010308

PUBLICATION DATE: 83

TITLE: WATER RESOURCES RESEARCH - PROBLEMS AND POTENTIALS FOR AGRICULTURE AND RURAL COMMUNITIES.

PERSONAL AUTHOR: NAPIER, TED L.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *ENVIRONMENT; *HISTORY; *IRRIGATION; *RESEARCH NEEDS; *SOCIAL IMPACTS; *WATER; *WATER RESOURCES; *WATER QUALITY

DESCRIPTIVE NOTE: 247P. PRICE: $6.00.

ABSTRACT: THIS PUBLICATION IS THE RESULT OF A NATIONAL SYMPOSIUM ON WATER RESOURCES RESEARCH. THE TEST FOCUSES ON: (1) WATER RESOURCES RESEARCH IN A HISTORICAL PERSPECTIVE, (2) WATER RESOURCES RESEARCH UNDERWAY, (3) POTENTIAL CONTRIBUTIONS IN WATER RESEARCH, AND (4) ALTERNATIVES FOR CONDUCTING THE NEEDED RESEARCH.

AVAILABILITY: SOIL CONSERVATION SOCIETY OF AMERICA, 7515 NORTHEAST ANKENY ROAD, ANKENY, IA 50021

IRIS ACCESSION NUMBER: EW010309

PUBLICATION DATE: FEB 82

TITLE: ENERGY MANAGEMENT DIAGNOSTICS.

DESCRIPTOR: *COSTS; *ENERGY; *ENERGY AUDITS; *ENERGY CONSERVATION; *ENERGY USE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 39P. PRICE: $1.00.

ABSTRACT: MOST OF THE WASTEWATER TREATMENT FACILITIES CONSTRUCTED IN THE U.S. WERE EITHER DESIGNED OR UNDER CONSTRUCTION BY THE EARLY 1970'S, AT A TIME WHEN ENERGY WAS CONSIDERED RELATIVELY INEXPENSIVE. BECAUSE OF THIS, FACILITIES WERE DESIGNED WITH AN EMPHASIS ON PERFORMANCE, NOT ENERGY EFFICIENCY. RECENTLY ENERGY AVAILABILITY AND COSTS HAVE BECOME MAJOR CONCERNS. THIS MANUAL PROVIDES PRINCIPLES AND PRACTICES OF SOUND ENERGY MANAGEMENT FOR WASTEWATER UTILITIES. INCLUDED ARE A REVIEW OF ENERGY USAGE, A METHOD FOR AN ENERGY MANAGEMENT AUDIT, AND A SERIES OF CHECKLISTS FOR ENERGY MANAGEMENT.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010310

PUBLICATION DATE: FEB 82

TITLE: CONTRACT OPERATIONS.

DESCRIPTOR: *CONTRACTS; *CONTRACT OPERATIONS; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *UTILITIES; *WASTEWATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 29P. PRICE: $1.00.

ABSTRACT: THIS MANUAL PRESENTS A DISCUSSION OF THE MANAGEMENT AND OPERATING PROBLEMS THAT CONTRACT OPERATIONS CAN ADDRESS. IT IS INTENDED TO GIVE UTILITY MANAGERS AND LOCAL DECISION-MAKERS A BETTER UNDERSTANDING OF THIS APPROACH AND A BETTER BASIS FOR COMPARING CONTRACT OPERATIONS TO OTHER SOLUTIONS FOR REDUCING OPERATING AND

MANAGEMENT PROBLEMS. INCLUDED IN THE DISCUSSIONS ARE SEVERAL ACTUAL EXAMPLES OF HOW CONTRACT OPERATIONS HAVE BEEN USED TO REDUCE OPERATING PROBLEMS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010311

PUBLICATION DATE: 83

TITLE: ACID RAIN - A WATER RESOURCES ISSUE FOR THE 80

PERSONAL AUTHOR: HERRMANN, RAYMOND; JOHNSON, A. IVAN

DESCRIPTOR: *ACID RAIN; *ECOLOGY; *ENVIRONMENTAL IMPACTS; *MONITORING; *NATIONAL PROBLEMS; *POLLUTION CONTROL; *RESEARCH; *WATER POLLUTION; *WATER QUALITY; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 83P.

ABSTRACT: THESE 11 PAPERS WERE REPRINTED FROM THE INTERNATIONAL SYMPOSIUM ON HYDROMETEOROLOGY. THE PAPERS ARE A REPRESENTATION OF THE CURRENT RESEARCH RELATED TO ACID RAIN. THE PAPERS STRESS THE NEED FOR NATIONAL AND INTERNATIONAL COOPERATION, THE NEED FOR A NATIONAL RESPONSE, THE IMPORTANCE OF ATMOSPHERIC TRANSPORT PROCESSES, PHYSICAL PROCESSES WHICH ARE AFFECTED, ASSOCIATED EFFECTS OF OXIDANTS AND PRECURSERS, AND THE MAGNITUDE AND SCOPE OF POTENTIAL BIOLOGICAL AND ECOLOGICAL EFFECTS.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410 GROSVENOR LANE, SUITE 220, BETHESDA, MD 20814

IRIS ACCESSION NUMBER: EW010312

PUBLICATION DATE: AUG 80

TITLE: THE ALTERNATIVE IS CONSERVATION.

DESCRIPTOR: *CONSERVATION; *CONSERVATION EDUCATION; *HOMES; *MUNICIPALITIES; *MANAGEMENT; *PLANNING; *POLLUTION CONTROL; *WATER CONSERVATION; *WATER SUPPLY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 39P. FRD-12. PRICE: $1.00.

ABSTRACT: THIS PUBLICATION PRESENTS INFORMATION ON (1) THE BENEFITS OF WATER CONSERVATION TO THE COMMUNITY, (2) THE ROLE OF CONSERVATION IN WATER SUPPLY AND WASTEWATER MANAGEMENT, (3) COMMUNITY MANAGEMENT REQUIREMENTS, (4) DEVICES HOMEOWNERS CAN USE TO CONSERVE WATER, (5) A DESCRIPTION OF EPA'S FACILITY PLANNING REQUIREMENTS AND IT'S RELATIONSHIP TO CONSERVATION PROGRAMS, (6) AND RESOURCE MATERIALS. THE FINAL SECTION IS A GLOSSARY OF TERMS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010313

PUBLICATION DATE: FEB 80

TITLE: EVALUATION OF SLUDGE MANAGEMENT SYSTEMS - EVALUATION CHECKLIST AND SUPPORTING COMMENTARY.

DESCRIPTOR: *DESIGN; *EVALUATION; *FACILITIES; *FACILITY PLANNING; *LAND APPLICATION; *MANAGEMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PLANNING; *SLUDGE; *SLUDGE MANAGEMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 250P. MCD-61. PRICE: $3.50. UPDATE TO EW 006227.

ABSTRACT: THIS BULLETIN IS INTENDED TO BE AN AID FOR REVIEW OF FACILITY PLANS, DESIGNS, SPECIFICATIONS, AND O AND M MANUALS WHICH DEAL WITH SLUDGE MANAGEMENT SYSTEMS. THE DOCUMENT IS DIVIDED INTO THREE PARTS: FACILITY PLANNING, DESIGN AND SPECIFICATIONS, AND OPERATION AND MAINTENANCE MANUALS. EACH PART CONTAINS A CHECKLIST OF PERTINENT FACTORS SUPPORTED BY TECHNICAL COMMENTARY. THIS TECHNICAL DISCUSSION IS SUFFICIENTLY DETAILED FOR AN UNDERSTANDING OF THE CONCEPTS, BUT NOT COMPLETE ENOUGH FOR DESIGN. IT CAN BE USED EFFECTIVELY IN FACILITY PLANNING AND PROJECT REVIEW.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010314

PUBLICATION DATE: JAN 77

TITLE: FEDERAL GUIDELINES - STATE AND LOCAL PRETREATMENT PROGRAMS VOLUME 1.

DESCRIPTOR: *LOCAL PROGRAMS; *GUIDELINES; *FEDERAL GUIDELINES; *MANAGEMENT; *MONITORING; *OPERATIONS (WASTEWATER); *POLLUTANTS; *PRETREATMENT; *STATE PROGRAMS; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 196P. MCD-43. PRICE: $2.50.

ABSTRACT: THESE GUIDELINES ARE A REVISION OF THE PREVIOUS GUIDELINES, "PRETREATMENT OF POLLUTANTS INTRODUCED INTO PUBLICLY OWNED TREATMENT WORKS." SECTIONS ARE INCLUDED ON MANAGEMENT, LEGAL ASPECTS, MONITORING, POLLUTANTS WHICH MAY INTERFERE WITH OR PASS THROUGH PUBLICLY OWNED TREATMENT WORKS, AND REMOVAL OF POLLUTANTS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010315

PUBLICATION DATE: JUL 81

TITLE: INSTITUTIONAL CONSTRAINTS AND PUBLIC ACCEPTANCE BARRIERS TO UTILIZATION OF MUNICIPAL WASTEWATER AND SLUDGE FOR LAND RECLAMATION AND BIOMASS PRODUCTION.

DESCRIPTOR: *BIOMASS PRODUCTION; *FACILITIES; *INSTITUTIONAL CONSTRAINTS; *LAND APPLICATION; *LAND RECLAMATION; *PROJECT DEVELOPMENT; *PUBLIC ACCEPTANCE; *RESEARCH REPORTS; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT; *REGULATIONS

DESCRIPTIVE NOTE: 107P. MCD-81. PRICE: $2.00.

ABSTRACT: THIS STUDY INVOLVED AN ANALYSIS OF THE INSTITUTIONAL CONSTRAINTS AND PUBLIC ACCEPTANCE BARRIERS TO THE DEVELOPMENT OF FULL SCALE PROJECTS UTILIZING SEWAGE SLUDGE IN LAND RECLAMATION AND BIOMASS PRODUCTION. THE FINDINGS OF THIS RESEARCH ARE OFTEN APPLICABLE TO A BROADER RANGE OF WASTEWATER AND SEWAGE SLUDGE LAND APPLICATION PROJECTS. SUGGESTIONS ARE GIVEN FOR STRATEGIES THAT HAVE PROVEN EFFECTIVE IN EXPEDITING PROJECTS SUCH AS DEMONSTRATION PROJECTS SITE VISITS, PUBLIC RELATIONS CAMPAIGNS, AND COMPENSATION SCHEMES.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010316

PUBLICATION DATE: SEP 81

TITLE: THE ROLE OF CONSERVATION DISTRICTS AND THE AGRICULTURAL COMMUNITY IN WASTEWATER LAND TREATMENT - FINAL REPORT.

DESCRIPTOR: *AGRICULTURE; *CASE STUDIES; *CONSERVATION DISTRICTS; *IRRIGATION; *LAND TREATMENT; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 23P. MCD-82. PRICE: $1.00.

ABSTRACT: THIS PUBLICATION WAS PREPARED TO CLARIFY THE POTENTIAL ROLE OF CONSERVATION DISTRICTS IN SEWAGE WASTEWATER APPLICATION TO LAND. INCLUDED IN THE PAPER ARE QUESTIONS AND ANSWERS ABOUT WASTEWATER IRRIGATION, CASE STUDIES OF WASTEWATER IRRIGATION, A SECTION ON CONSERVATION DISTRICTS, AND APPENDICES.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010317

PUBLICATION DATE: MAR 75

TITLE: WASTEWATER TREATMENT PONDS.

DESCRIPTOR: *BIBLIOGRAPHIES; *FACILITIES; *OPERATIONS (WASTEWATER); *PONDS; *SECONDARY TREATMENT; *TREATMENT PONDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 39P. MCD-14. PRICE:$ $1.00.

ABSTRACT: THIS BULLETIN PRESENTS TECHNICAL INFORMATION RELATED TO WASTEWATER TREATMENT PONDS. INCLUDED IN THE PUBLICATION ARE DESCRIPTIONS OF POND CHARACTERISTICS, UPGRADING PROCEDURES, A BIBLIOGRAPHY, AND INFORMATION FROM THE FEDERAL REGISTER RELATED TO SECONDARY TREATMENT AND TREATMENT PONDS.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

INSTITUTION NAME: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER PROGRAM OPERATIONS.

IRIS ACCESSION NUMBER: EW010318

PUBLICATION DATE: SEP 82

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XI.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; ENVIRONMENTAL EDUCATION; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; HAZARDOUS MATERIALS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 145P. PRICE: $4.00.

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. ALSO INCLUDED ARE PROCEDURES TO ILLUSTRATE HOW INSTRUCTORS AND CURRICULUM DEVELOPERS IN THE WATER QUALITY CONTROL FIELD CAN LOCATE INSTRUCTIONAL MATERIALS TO MEET VERY GENERAL OR HIGHLY SPECIFIC REQUIREMENTS OF THEIR PROGRAMS. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A

COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES" OR IRIS SUPPLEMENTS 1-10.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010319

PUBLICATION DATE: DEC 82

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XII.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; ENVIRONMENTAL EDUCATION; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; HAZARDOUS MATERIALS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 134P. PRICE: $4.00.

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. ALSO INCLUDED ARE PROCEDURES TO ILLUSTRATE HOW INSTRUCTORS AND CURRICULUM DEVELOPERS IN THE WATER QUALITY CONTROL FIELD CAN LOCATE INSTRUCTIONAL MATERIALS TO MEET VERY GENERAL OR HIGHLY SPECIFIC REQUIREMENTS OF THEIR PROGRAMS. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES" OR IRIS SUPPLEMENTS 1-11.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010320

PUBLICATION DATE: APR 83

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XIII.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; ENVIRONMENTAL EDUCATION; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; HAZARDOUS MATERIALS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 145P. PRICE: $4.00.

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. ALSO INCLUDED ARE PROCEDURES TO ILLUSTRATE HOW INSTRUCTORS AND CURRICULUM DEVELOPERS IN THE WATER QUALITY CONTROL FIELD CAN LOCATE INSTRUCTIONAL MATERIALS TO MEET VERY GENERAL OR HIGHLY SPECIFIC REQUIREMENTS OF THEIR PROGRAMS. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES" OR IRIS SUPPLEMENTS 1-12.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010321

PUBLICATION DATE: JUL 83

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XIV.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; ENVIRONMENTAL EDUCATION; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 147P. PRICE: $4.00.

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. ALSO INCLUDED ARE PROCEDURES TO ILLUSTRATE HOW INSTRUCTORS AND CURRICULUM DEVELOPERS IN THE WATER QUALITY CONTROL FIELD CAN LOCATE INSTRUCTIONAL MATERIALS TO MEET VERY GENERAL OR HIGHLY SPECIFIC REQUIREMENTS OF THEIR PROGRAMS. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES" OR IRIS SUPPLEMENTS 1-13.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010322

PUBLICATION DATE: OCT 83

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS) SUPPLEMENT XV.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; ENVIRONMENTAL EDUCATION; INDEXES; INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; PESTICIDES; POSTSECONDARY EDUCATION; TECHNOLOGY; WASTE DISPOSAL; *WASTEWATER; WATER; WATER POLLUTION; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 137P. PRICE: $4.00.

ABSTRACT: COMPILED ARE ABSTRACTS AND INDEXES TO SELECTED PRINT AND NON-PRINT MATERIALS RELATED TO WASTEWATER TREATMENT AND WATER QUALITY EDUCATION AND INSTRUCTION, AS WELL AS MATERIALS RELATED TO PESTICIDES, HAZARDOUS WASTES, AND PUBLIC PARTICIPATION. SOURCES OF ABSTRACTED/INDEXED MATERIALS INCLUDE ALL LEVELS OF GOVERNMENT, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. TITLE, AUTHOR(S), PUBLICATION DATE, CROSS-REFERENCES, DESCRIPTORS, AND AVAILABILITY ARE PROVIDED FOR EACH ENTRY. ALSO INCLUDED ARE PROCEDURES TO ILLUSTRATE HOW INSTRUCTORS AND CURRICULUM DEVELOPERS IN THE WATER QUALITY CONTROL FIELD CAN LOCATE INSTRUCTIONAL MATERIALS TO MEET VERY GENERAL OR HIGHLY SPECIFIC REQUIREMENTS OF THEIR PROGRAMS. THIS PUBLICATION SUPPLEMENTS AND DOES NOT REPLACE "WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS): A COMPILATION OF ABSTRACTS TO WATER QUALITY AND WATER RESOURCES" OR IRIS SUPPLEMENTS 1-14.
AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010324

PUBLICATION DATE: DEC 82

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES SYSTEM MONOGRAPH SERIES: PUBLIC PARTICIPATION.

PERSONAL AUTHOR: LUKCO, BERNARD J.; ELLIS, RICHARD A.

DESCRIPTOR: *BIBLIOGRAPHIES; *CASE STUDIES; *EVALUATION; *INSTRUCTIONAL MATERIALS; *INSTRUCTION; *PLANNING; *POLICY; *PUBLIC PARTICIPATION; *PROGRAM DEVELOPMENT

DESCRIPTIVE NOTE: 361P. PRICE: $10.00.

ABSTRACT: THIS DOCUMENT IS PART OF THE INSTRUCTIONAL RESOURCES MONOGRAPH SERIES. THIS MONOGRAPH IS DESIGNED TO (1) PROVIDE BACKGROUND INFORMATION ON THE ESSENTIALS OF THE PROCESS OF PUBLIC PARTICIPATION AND (2) PROVIDE USEFUL REFERENCE MATERIALS RELATED TO ASPECTS OF PUBLIC PARTICIPATION. SECTIONS IN THE PUBLICATION INCLUDE (1) CONTEXT OF CONTEMPORARY PUBLIC PARTICIPATION, (2) DEFINING PUBLIC PARTICIPATION, (3) ORGANIZING AND PLANNING A PROGRAM, (4) INFORMATION DISSEMINATION, (5) CONSULTATION METHODS, (6) EDUCATING THE PUBLIC, (7) INSTRUCTIONAL SKILLS, (8) WORKING WITH GROUPS, (9) EVALUATION, RESPONSE, AND ANALYSIS, (10) CASE STUDIES OF PUBLIC PARTICIPATION, AND (11) PUBLIC PARTICIPATION POLICY. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: EPA INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW010325

PUBLICATION DATE: FALL 83

TITLE: PROPER MANNING'S "N" FOR SANITARY SEWER DESIGN.

PERSONAL AUTHOR: WALKER, ROBERT

DESCRIPTOR: *COMPARATIVE ANALYSIS; *CONCRETE PIPE; *HYDRAULIC CHARACTERISTICS; *MANNING'S "N"; *SEWER PIPES; *PIPES; *PVC PIPE; *VITRIFIED CLAY PIPE; *WATER PIPES

DESCRIPTIVE NOTE: 1-3,5P.

ABSTRACT: DISCUSSED ARE MANNING'S "N" VALUES FOR VARIOUS SIZE PIPES, PIPE TYPES, AND VELOCITIES. PVC PIPE MANNING "N" VALUES ARE CONSISTENTLY LOWER THAN VITRIFIED CLAY AND CONCRETE PIPE.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V6 N3

IRIS ACCESSION NUMBER: EW010326

PUBLICATION DATE: FALL 83

TITLE: EVALUATING CROSS-SECTIONAL AREA OF CIRCULAR PIPE.

PERSONAL AUTHOR: POON, DON; DUFFEE, SPARKS

DESCRIPTOR: *CALCULATOR PROGRAMS; *FLUID FLOW; *HYDRAULICS; *PIPES; *PIPE VOLUME; *SEWERS

DESCRIPTIVE NOTE: 4,8P.

ABSTRACT: PRESENTED IS A PROGRAM FOR A HEWLETT PACKARD 41C CALCULATOR. THE PROGRAM IS FOR EVALUATING THE CROSS-SECTIONAL AREA OF CIRCULAR PIPE. INFORMATION CAN BE USED TO ESTIMATE THE CAPACITY OF A SEWER TRUNK AND OTHER FLOW INFORMATION.

AVAILABILITY: UNI-BELL PVC PIPE NEWS; V6 N3

IRIS ACCESSION NUMBER: EW010327

PUBLICATION DATE: NOV 83

TITLE: A RATIONAL EVALUATION OF CANCER MORTALITY ASSOCIATIONS WITH TREATED DRINKING WATER.

PERSONAL AUTHOR: TIERNAN, J. E.

DESCRIPTOR: *CANCER; *CHLORINATION; *DRINKING WATER; *POLLUTANTS; *RECOMMENDATIONS; *RESEARCH REVIEWS; *RESEARCH NEEDS; *SOCIAL RELATIONSHIPS; *WATER TREATMENT

DESCRIPTIVE NOTE: 118-126P.

ABSTRACT: THIS ARTICLE REVIEWS DATA RELATED TO CANCER MORTALITY AND DRINKING WATER.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V46 N3

IRIS ACCESSION NUMBER: EW010328

PUBLICATION DATE: NOV 83

TITLE: LANDFILL GAS UTILIZATION AT A WASTEWATER TREATMENT PLANT.

PERSONAL AUTHOR: WEDDLE, CLARK L.; AND OTHERS

DESCRIPTOR: *CALIFORNIA; *ENERGY SOURCES; *COSTS; *GAS USE; *DESIGN; *LANDFILLS; *FEASIBILITY STUDIES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1325-1330P.

ABSTRACT: THE USE OF LANDFILL GAS AT CENTRAL CONTRA COSTA REDUCED FUEL COSTS BY 20 TO 25%, AND THE CAPITAL COSTS FOR CONVERSION WERE RECOVERED WITHIN A YEAR. A DISCUSSION OF THIS OPERATION IS PRESENTED INCLUDING ITS ORIGIN, THE FEASIBILITY STUDY, DESIGN, PROJECT COSTS, AND OPERATING EXPERIENCE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010329

PUBLICATION DATE: NOV 83

TITLE: INFLUENCE OF THREE FACTORS ON CLARIFICATION IN THE ACTIVATED SLUDGE PROCESS.

PERSONAL AUTHOR: CAHSION, BRYAN S.; KEINATH, THOMAS M.

DESCRIPTOR: *ACTIVATED SLUDGE; *CLARIFICATION; *MODELS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1331-1337P.

ABSTRACT: BASED ON THIS STUDY, ACTIVATED SLUDGE PLANTS SHOULD BE DESIGNED AND OPERATED WITH SHORT HYDRAULIC RETENTION TIMES, BUT WITH LONG SOLIDS RETENTION TIMES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010330

PUBLICATION DATE: NOV 83

TITLE: OXYGEN TRANSFER EFFICIENCY MEASUREMENTS IN MIXED LIQUOR USING OFF-GAS TECHNIQUES.

PERSONAL AUTHOR: REDMON, DAVID; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *INSTRUMENTATION; *MEASUREMENT TECHNIQUES; *OFF-GAS MEASUREMENT TECHNIQUES; *OPERATIONS (WASTEWATER); *OXYGEN TRANSFER; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1338-1347P.

ABSTRACT: THE OFF-GAS MEASUREMENT TECHNIQUE MAY BE A TOOL FOR OBTAINING MORE USEFUL DESIGN DATA FOR AERATION SYSTEMS. THIS ARTICLE DESCRIBES THIS METHOD, DISCUSSES ITS LIMITATION, AND PROVIDES DATA ON RECENTLY CONDUCTED FIELD STUDIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010331

PUBLICATION DATE: NOV 83

TITLE: ONE-YEAR SURVEY OF ATP AND DYNAMIC BEHAVIOR OF AN ACTIVATED SLUDGE TREATMENT PLANT.

PERSONAL AUTHOR: ROY, D.; AND OTHERS

DESCRIPTOR: *ADENOSINE TRIPHOSPHATE; *ATP; *ACTIVATED SLUDGE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SURVEYS; *RESEARCH; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1348-1354P.

ABSTRACT: IN A ONE-YEAR STUDY, ATP DID NOT CORRELATE WELL WITH BIOMASS-RELATED VARIABLES, BUT LOW VALUES DID SEEM TO INDICATE POOR AERATION PERFORMANCE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010332

PUBLICATION DATE: NOV 83

TITLE: THE FATE AND EFFECT OF BISULFATE IN ANAEROBIC TREATMENT.

PERSONAL AUTHOR: EIS, BRIAN J.; AND OTHERS

DESCRIPTOR: *ANAEROBIC TREATMENT; *COSTS; *PH; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SULFUR DIOXIDE; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1355-1365P.

ABSTRACT: SULFUR DIOXIDE DOES NOT SEVERELY INHIBIT METHANOGENESIS, BUT DOES REQUIRE NEUTRALIZATION WITHIN PROPER LIMITS. THE PRACTICAL RESULT OF THE STUDY IS AN ASSESSMENT OF THE COSTS AND EFFECTS OF SO2 IN AN ACIDIC WASTE. THERE ARE NO BENEFITS, BUT THE ADVERSE EFFECTS WERE FOUND TO BE MANAGEABLE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010333

PUBLICATION DATE: NOV 83

TITLE: MEASURING THE EFFECT OF BIOCATALYTIC ADDITIVES ON TREATMENT PROCESS PERFORMANCE.

PERSONAL AUTHOR: WOJNOWSKA-BARYLA, IRENA; YOUNG, JAMES C.

DESCRIPTOR: *BIOCATALYTIC AGENTS; *ORGANIC COMPOUNDS; *OPERATIONS (WASTEWATER); *OXYGEN UPTAKE; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1373-1380P.

ABSTRACT: A STUDY WAS CONDUCTED TO DEVELOP AND DEMONSTRATE A TEST METHOD TO MEASURE EFFECTS OF BIOCATALYTIC AGENTS. THE EFFECTS OBSERVED INCLUDED A HIGHER RATE OF OXYGEN UPTAKE AND AN INCREASED RATE REMOVAL OF ORGANIC COMPOUNDS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010334

PUBLICATION DATE: NOV 83

TITLE: LIME STABILIZATION: EFFECTIVENESS OF TWO PROCESS MODIFICATIONS.

PERSONAL AUTHOR: WESTPHAL, PATRICIA A.; CHRISTENSEN, G. LEE

DESCRIPTOR: *COLIFORMS; *FECAL BACTERIA; *LIME STABILIZATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1381-1386P.

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO DETERMINE THE EFFECTIVENESS OF PROCESS MODIFICATIONS. LIME STABILIZATION PERFORMED AT LEAST AS WELL AS OTHER METHODS IN REDUCING FECAL COLIFORM AND FECAL STREPTOCOCCUS DENSITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010335

PUBLICATION DATE: NOV 83

TITLE: COMPOSITE SAMPLES OVERESTIMATE WASTE LOADS.

PERSONAL AUTHOR: SCHAEFFER, DAVID J.; AND OTHERS

DESCRIPTOR: *COMPOSITE SAMPLES; *DATA ANALYSIS; *GRAB SAMPLES; *MONITORING; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SAMPLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1387-1392P.

ABSTRACT: CONTRARY TO PUBLIC OPINION, BOTH TIME-PROPORTIONED AND VOLUME-PROPORTIONED COMPOSITE SAMPLES CAN BE BIASED, AND MONITORING DATA MUST BE ANALYZED ACCORDINGLY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010336

PUBLICATION DATE: NOV 83

TITLE: MANAGEMENT OF A GROUNDWATER PROBLEM.

PERSONAL AUTHOR: STOLLAR, ROBERT L.; AND OTHERS

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *MANAGEMENT; *MONITORING; *POLLUTANTS; *SAMPLING; *WATER QUALITY; *WELLS

DESCRIPTIVE NOTE: 1393-1403P.

ABSTRACT: USING RESISTIVITY MEASUREMENTS, HIGH CONCENTRATIONS OF CONDUCTIVE POLLUTANTS CAN BE QUICKLY AND ACCURATELY TRACED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N11

IRIS ACCESSION NUMBER: EW010337

PUBLICATION DATE: DEC 83

TITLE: HOW TO SET UP A PUBLIC WORKS EMPLOYEE SAFETY PROGRAM.

DESCRIPTOR: *ACCIDENT PREVENTION; *RECOMMENDATIONS; *SAFETY; *TRAINING PROGRAMS; *PUBLIC WORKS

DESCRIPTIVE NOTE: 30-32P.

ABSTRACT: THIS ARTICLE DESCRIBES HOW TO SET UP A PUBLIC WORKS SAFETY TRAINING PROGRAM. THE ARTICLE IS BASED ON AN OUTLINE OF A DRAFT OF A CHAPTER SAFETY MANUAL PREPARED BY THE AMERICAN PUBLIC WORKS ASSOCIATION.

AVAILABILITY: PUBLIC WORKS; V114 N12

IRIS ACCESSION NUMBER: EW010338
PUBLICATION DATE: DEC 83

TITLE: WATERSHED-WDIE APPROACH SIGNIFICANTLY REDUCES LOCAL STORMWATER MANAGEMENT COSTS.

PERSONAL AUTHOR: HARTIGAN, JOHN P.

DESCRIPTOR: *COSTS; *EVALUATION; *MODELS; *ONSITE DETENTION; *PERFORMANCE EVALUATION; *STORMWATER; *SURFACE RUNOFF; *WASTEWATER COLLECTION; *URBAN RUNOFF; *WATERSHED PLANNING

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: PRESENTED IS AN ANALYSIS OF WATERSHED-WIDE VERSUS ONSITE CONTROL OF URBAN RUNOFF. ADVANTAGES AND COSTS FAVOR WATERSHED-WIDE MANAGEMENT.

AVAILABILITY: PUBLIC WORKS; V114 N12

IRIS ACCESSION NUMBER: EW010339

PUBLICATION DATE: DEC 83

TITLE: INSTRUMENTS YOU CAN RELY ON - PART 2.

PERSONAL AUTHOR: KNUDSEN, DAG I.; AND OTHERS

DESCRIPTOR: *AIRFLOW MEASUREMENT; *AUTOMATIC CONTROLS; *DO METERS; *INSTRUMENTATION; *MAINTENANCE; *OPERATIONS

DESCRIPTIVE NOTE: 43-45P.

ABSTRACT: THIS IS THE CONCLUSION OF A TWO-PART ARTICLE. DISCUSSED ARE DO METERS, AIRFLOW MEASUREMENT, AND AUTOMATIC CONTROLS.

AVAILABILITY: PUBLIC WORKS; V114 N12

IRIS ACCESSION NUMBER: EW010340

PUBLICATION DATE: DEC 83

TITLE: AN AMBITIOUS SLUDGE DISPOSAL PROGRAM.

PERSONAL AUTHOR: VAN TEYLINGEN, JIM

DESCRIPTOR: *COLORADO; *LAND APPLICATION; *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 49-51P.

ABSTRACT: DESCRIBED IS HOW COLORADO SPRINGS MAKES USE OF CITY-OWNED PROPERTY FOR LAND APPLICATION OF SLUDGE WITH SUBSURFACE INJECTION MACHINES.

AVAILABILITY: PUBLIC WORKS; V114 N12

IRIS ACCESSION NUMBER: EW010341
PUBLICATION DATE: DEC 83

TITLE: PRINCIPLES OF ENVIRONMENTAL ANALYSIS.

PERSONAL AUTHOR: KEITH, LAWRENCE H.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ENVIRONMENT; *ENVIRONMENTAL ANALYSIS; *INSTRUMENTATION; *MEASUREMENT; *MONITORING; *QUALITY CONTROL; *SAMPLING

DESCRIPTIVE NOTE: 2210-2218P.

ABSTRACT: THIS ARTICLE PRESENTS PRINCIPLES OF ENVIRONMENTAL ANALYSIS ORGANIZED ACCORDING TO A GENERAL OPERATIONAL MODEL FOR CONDUCTING ANALYTICAL MEASUREMENTS OF ENVIRONMENTAL SAMPLES. THE DOCUMENT IDENTIFIES ELEMENTS NEEDED TO OBTAIN RELIABLE DATA AS WELL AS FACTORS THAT HAVE BEEN SHOWN TO PRODUCE UNRELIABLE MEASUREMENTS.

AVAILABILITY: ANALYTICAL CHEMISTRY; V55 N14

IRIS ACCESSION NUMBER: EW010342

PUBLICATION DATE: DEC 83

TITLE: A CHECKLIST FOR SELECTING THE RIGHT TELECONFERENCING MODE.

PERSONAL AUTHOR: LOWENTHAL, JEF; JANKOWSKI, PAT

DESCRIPTOR: *CHECKLISTS; *CONFERENCES; *COSTS; *MEETINGS; *PLANNING; *RECOMMENDATIONS; *TELECONFERENCING

DESCRIPTIVE NOTE: 47-49P.

ABSTRACT: THIS ARTICLE PRESENTS A CHECKLIST AND PROVIDES SOME RECOMMENDATIONS FOR SELECTING A TELECONFERENCING MODE FOR A MEETING.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V37 N12

IRIS ACCESSION NUMBER: EW010343

PUBLICATION DATE: DEC 83

TITLE: DEVELOPING A SALARY PROGRAM.

PERSONAL AUTHOR: MONEY, WALTER C.

DESCRIPTOR: *PERSONNEL; *PERSONNEL PROGRAMS; *SALARY PROGRAMS; *SALARIES; *RECOMMENDATIONS

DESCRIPTIVE NOTE: 588-591P.

ABSTRACT: A REALISTIC SALARY PROGRAM IS DEVELOPED THROUGH JOB DESCRIPTIONS, JOB CLASSIFICATIONS, JOB EVALUATIONS, WAGE AND SALARY SURVEYS, AND SALARY ADMINISTRATION. PRESENTED ARE RECOMMENDED METHODS OF INSTITUTING A SALARY PROGRAM BASED ON

OBJECTIVE ANALYSES OF THE FUNCTIONS PERFORMED AND THE QUALIFICATIONS REQUIRED FOR THE POSITION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010344

PUBLICATION DATE: DEC 83

TITLE: TAILORING BENEFITS TO ATTRACT EFFECTIVE MANAGERS.

PERSONAL AUTHOR: ROBERTSON, THOMAS T.; HARROLD, STEVEN A.

DESCRIPTOR: *BENEFIT PROGRAMS; *COMPENSATION; *EMPLOYEE BENEFITS; *MANAGERS; *PERSONNEL; *PLANNING; *RECRUITMENT

DESCRIPTIVE NOTE: 592-595P.

ABSTRACT: PROPERLY DESIGNED BENEFIT PROGRAMS CAN BE AN IMPORTANT ASPECT OF AN ORGANIZATION'S ABILITY TO ATTRACT AND RETAIN KEY PERSONNEL, PROVIDED THE SALARY STRUCTURE IS COMPETITIVE AND THE SUBJECTIVE FEATURES OF THE WORKING CONDITIONS ARE PERCEIVED POSITIVELY. THIS ARTICLE ADDRESSES THE OBJECTIVES OF BENEFIT PROGRAMS, THE RELATIVE IMPORTANCE OF BOTH BROAD-BASED AND SPECIAL BENEFITS, AND THE INCREASING IMPORTANCE OF FLEXIBILITY IN BENEFIT PROGRAMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010345

PUBLICATION DATE: DEC 83

TITLE: FLEXIBLE BENEFITS FOR EMPLOYEES.

PERSONAL AUTHOR: JOMO, DONALD R.

DESCRIPTOR: *BENEFIT PROGRAMS; *BENEFITS; *COMPENSATION; *EMPLOYEE BENEFITS; *PERSONNEL; *PLANNING

DESCRIPTIVE NOTE: 596-599P.

ABSTRACT: LEGISLATIVE CHANGES THAT ADDRESS THE CHANGING CHARACTERISTICS OF TODAY'S WORK FORCE PERMIT OPTIONS AMONG EMPLOYEE BENEFITS. THE FEATURES OF THE VARIOUS PLANS ARE SUMMARIZED, AND BACKGROUND INFORMATION IS PROVIDED FOR EMPLOYERS WHO ARE IN THE PROCESS OF UPDATING BENEFIT PACKAGES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010346

PUBLICATION DATE: DEC 83

TITLE: SELF-ESTEEM IN THE WORKPLACE.

PERSONAL AUTHOR: BAREFIELD, ROBERT F.

DESCRIPTOR: *JOB PERFORMANCE; *MANAGEMENT; *MORALE; *PERSONNEL; *SELF-ESTEEM

DESCRIPTIVE NOTE: 600-603P.

ABSTRACT: SELF-ESTEEM IS DETERMINED IN PART BY EMPLOYEES' PERCEPTION OF THE PRESTIGE OF THE ORGANIZATION FOR WHICH THEY WORK AND BY THE ORGANIZATION'S PERCEPTION OF THE JOB PERFORMED. SINCE LOW SELF-ESTEEM ADVERSELY AFFECTS JOB PERFORMANCE, SUGGESTIONS ARE GIVEN TO IMPROVE EFFICIENCY THROUGH ENHANCEMENT OF EMPLOYEES' PERCEPTION OF THEIR SELF-WORTH.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010347

PUBLICATION DATE: DEC 83

TITLE: DEVELOPMENTS IN WATER SOFTENING BY MEANS OF PELLET REACTORS.

PERSONAL AUTHOR: GRAVELAND, A.; AND OTHERS

DESCRIPTOR: *COSTS; *NETHERLANDS; *OPERATIONS (WATER); *PELLET REACTORS; *PERFORMANCE EVALUATION; *WATER SOFTENING; *WATER TREATMENT

DESCRIPTIVE NOTE: 619-625P.

ABSTRACT: IN THE NETHERLANDS THE PROCESS OF PELLET SOFTENING HAS BEEN OPTIMIZED TO PROVIDE LOW COST AND FLEXIBLE AND STABLE OPERATION AS WELL AS TO ELIMINATE PROBLEMS WITH SOLIDS DISPOSAL.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010348

PUBLICATION DATE: DEC 83

TITLE: EQUIVALENCY TESTING OF PROCEDURES FOR MEASURING FREE AVAILABLE CHLORINE: AMPEROMETRIC TITRATION, DPD, AND FACTS.

PERSONAL AUTHOR: COOPER, WILLIAM J.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINE; *COMPARATIVE ANALYSIS; *AMPEROMETRIC TITRATION; DPD; *LABORATORY PROCEDURES; *FACTS; *MEASUREMENT; *PERFORMANCE EVALUATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 625-629P.
ABSTRACT: ANALYSTS AT PARTICIPATING WATER TREATMENT PLANT LABORATORIES MEASURED FREE AVAILABLE CHLORINE IN SAMPLES BY USING A STANDARD PROCEDURE AND AN ALTERNATIVE PROCEDURE. SINGLE ANALYST PRECISION AND EQUIVALENCY TEST RESULTS BASED ON THOSE MEASUREMENTS ARE DESCRIBED IN THIS ARTICLE ALONG WITH A LIMITED THREE-WAY COMPARISON OF ALL THREE PROCEDURES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N12

IRIS ACCESSION NUMBER: EW010349

PUBLICATION DATE: DEC 83

TITLE: PERMISSIONS, FORMATS, PRICE-FACTORS IN PROGRAM PLAYBACK.

PERSONAL AUTHOR: WINSLOW, KEN

DESCRIPTOR: *AUDIOVISUAL AIDS; *FILMS; *INSTRUCTIONAL MATERIALS; *PERMISSIONS; *ROYALTIES; *VIDEOCASSETTES

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: THIS ARTICLE PROVIDES INFORMATION REGARDING PERMISSIONS, FORMATS, AND PRICE-FACTORS IN PROGRAM PLAYBACK OF VIDEOCASSETTES AND FILMS.

AVAILABILITY: E-I TV; V15 N12

IRIS ACCESSION NUMBER: EW010350

PUBLICATION DATE: NOV 83

TITLE: NEVADA POWER EMPLOYS ADVANCED TECHNOLOGY IN WATER POLLUTION CONTROL.

PERSONAL AUTHOR: ALLSOP, GUS; COLLINS, THOMAS G.

DESCRIPTOR: *GEOTEXTILE LINERS; *HEAT; *NEVADA; *POWER UTILITIES; *PONDS; *TECHNOLOGY; *TEMPERATURE; *WATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 20-21P.

ABSTRACT: DESCRIBED ARE ACTIONS TAKEN BY NEVADA POWER TO COMPLY WITH WATER POLLUTION CONTROL REQUIREMENTS. TWO OF THE POWER STATIONS HAD VIOLATIONS OF SEVERAL LIMITS AND WERE REQUIRED TO MODIFY WATER DISCHARGE.

AVAILABILITY: INDUSTRIAL WASTE; V29 N6

IRIS ACCESSION NUMBER: EW010351
PUBLICATION DATE: WIN 83

TITLE: 20/20 HINDSIGHT WITH THE AID OF A COMPUTER.

PERSONAL AUTHOR: VANNOY, DONALD W.

DESCRIPTOR: *AEPIC; *COMPUTER APPLICATIONS; *DATABASES; *ENGINEERING PERFORMANCE INFORMATION; *INFORMATION DISSEMINATION; NSF; *REFERENCE LIBRARIES; *STRUCTURAL FAILURES

DESCRIPTIVE NOTE: 21-25P.

ABSTRACT: THE WORLD'S FIRST COMPUTERIZED ARCHIVE OF DATA ON STRUCTURAL FAILURES IS HELPING ENGINEERS LEARN FROM THE MISTAKES OF OTHERS. THE ARCHITECTURE AND ENGINEERING PERFORMANCE INFORMATION CENTER (AEPIC) AT THE UNIVERSITY OF MARYLAND IS DESCRIBED.

AVAILABILITY: PROFESSIONAL ENGINEER; V53 N4

IRIS ACCESSION NUMBER: EW010352

PUBLICATION DATE: DEC 83

TITLE: OCEAN DUMPING: SEEN THROUGH THE LEGAL FOG.

PERSONAL AUTHOR: FADER, STEPHEN S.

DESCRIPTOR: *LEGISLATION; *OCEAN DUMPING; *REGULATIONS; *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL; *WASTEWATER DISPOSAL; *WATER QUALITY

DESCRIPTIVE NOTE: 24-30P.

ABSTRACT: A TANGLE OF LEGISLATION GOVERNS THE DISPOSAL OF MUNICIPAL WASTEWATER SLUDGE. ONE OF THE DISPOSAL OPTIONS IS OCEAN DUMPING, WHICH IS EFFECTIVELY BARRED AT PRESENT, BUT WHICH MAY AGAIN BE CONSIDERED AS A VIABLE METHOD. VARIOUS RULINGS AND REGULATIONS ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N13

IRIS ACCESSION NUMBER: EW010353

PUBLICATION DATE: DEC 83

TITLE: PHOSPHORUS CONTROL MEASURES PAY OFF IN THE GREAT LAKES.

PERSONAL AUTHOR: HARTIG, JOHN H.

DESCRIPTOR: *GREAT LAKES; *LAKES; *LAKE ERIE; *OPERATIONS (WASTEWATER); *PHOSPHORUS; *POLLUTION CONTROL; *WASTEWATER TREATMENT; *WATER QUALITY CONTROL

DESCRIPTIVE NOTE: 32-35P.

ABSTRACT: AS DETROIT'S WASTEWATER TREATMENT PLANT HAS BEEN EXPANDED AND UPGRADED OVER THE LAST SEVERAL YEARS, THE CONTROL OF PHOSPHORUS HAS BECOME VASTLY BETTER. THE RESULTS ARE CLEARLY EVIDENT IN WESTERN LAKE ERIE'S IMPROVED WATER QUALITY.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N13

IRIS ACCESSION NUMBER: EW010354

PUBLICATION DATE: DEC 83

TITLE: SPACE-AGE ALLOYS SOLVE SLUDGE DISPOSAL PROBLEM.

PERSONAL AUTHOR: HARPAZ, DOV; OETTINGER, THOMAS P.

DESCRIPTOR: *CORROSION; *EQUIPMENT; *OPERATIONS (WASTEWATER); *SLUDGE; *TEMPERATURE; *WASTEWATER TREATMENT; *WET AIR OXIDATION

DESCRIPTIVE NOTE: 36,38P.

ABSTRACT: A SLUDGE DESTRUCTION PROBLEM WAS SOLVED WHEN ENGINEERS ESTABLISHED THAT SPECIAL NICKEL-BASED ALLOYS COULD RESIST THE HIGH TEMPERATURE CORROSION ENCOUNTERED IN PROCESSING.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N13

IRIS ACCESSION NUMBER: EW010355

PUBLICATION DATE: DEC 83

TITLE: LIQUID CO2--SAFE, CONVENIENT AND EFFECTIVE.

PERSONAL AUTHOR: KRAUSS, JOHN C.

DESCRIPTOR: *CARBON DIOXIDE; *CARBONATION; *PH; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: LIQUID CARBON DIOXIDE IS CHEMICALLY EFFECTIVE WHEN IT COMES TO RECARBONATION AND PH CONTROL IN WATER AND WASTEWATER TREATMENT PROCESSES. IT IS ALSO EASY AND SAFE TO HANDLE. USE OF CARBON DIOXIDE AND SOME HANDLING PROCEDURES ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N13

IRIS ACCESSION NUMBER: EW010356

PUBLICATION DATE: DEC 83

TITLE: STRIP THOSE ORGANICS AWAY.

PERSONAL AUTHOR: SULLIVAN, KEVIN; LENZO, FRANK

DESCRIPTOR: *AIR STRIPPING; *EQUIPMENT; *ORGANIC COMPOUNDS; *OPERATIONS (WATER); *WATER TREATMENT; *VOLATILE ORGANIC COMPOUNDS

DESCRIPTIVE NOTE: 46-47P.

ABSTRACT: VOLATILE ORGANIC COMPOUNDS CONTAMINATED WATER SUPPLIES MAY YET BECOME A PROBLEM FOR MANY COMMUNITIES. DESCRIBED IS A SYSTEM THAT IS BEING APPLIED SUCCESSFULLY FOR ORGANICS REMOVAL.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N13

IRIS ACCESSION NUMBER: EW010357

PUBLICATION DATE: MAR 83

TITLE: DEVELOPMENT AND EVALUATION OF VISCOUS OIL RECOVERY EQUIPMENT.

PERSONAL AUTHOR: SCOTT, J. G.

DESCRIPTOR: *EQUIPMENT; *OIL; *OIL SPILLS; *OIL RECOVERY; *PERFORMANCE EVALUATION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 28-35P.

ABSTRACT: THIS ARTICLE DESCRIBES OIL RECOVERY PRINCIPLES AND THE DEVELOPMENT AND EVALUATION OF OIL POLLUTION RECOVERY EQUIPMENT.

AVAILABILITY: SPILL TECHNOLOGY; V8 N2

IRIS ACCESSION NUMBER: EW010359

PUBLICATION DATE: 82

TITLE: PRACTICAL SOLUTIONS IN DRINKING WATER SUPPLY AND WASTE DISPOSAL FOR DEVELOPING COUNTRIES.

DESCRIPTOR: *DEVELOPING COUNTRIES; *DRINKING WATER; *PUBLIC HEALTH; RURAL AREAS; *SANITATION; *WASTE DISPOSAL; *WATER DISTRIBUTION; *WATER RESOURCES; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 120P.

ABSTRACT: THIS PUBLICATION WAS THE RESULT OF A SURVEY SEEKING USEFUL AND PRACTICAL IDEAS FOR WATER SUPPLY AND SANITATION. THE BOOK IS CLASSIFIED INTO FOUR SECTIONS: (1) WATER RESOURCES AND RECOVERY; (2) WATER TREATMENT; (3) WATER TRANSPORT AND DISTRIBUTION; AND (4) WASTE DISPOSAL.

AVAILABILITY: WHO (WORLD HEALTH ORGANIZATION), 49 SHERIDAN AVE., ALBANY, NY 12210

IRIS ACCESSION NUMBER: EW010360
PUBLICATION DATE: JUL 83

TITLE: WASTES TO RESOURCES: APPROPRIATE TECHNOLOGIES FOR SEWAGE TREATMENT AND CONVERSION.

PERSONAL AUTHOR: ANDERSON, S. P.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *MANAGEMENT; *ENERGY; *OPERATIONS (WASTEWATER); *RECOMMENDATIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30P. PRICE CODE: PC A03/MF A01. DE83015398.

ABSTRACT: BACKGROUND INFORMATION IS PRESENTED ON SEWAGE TREATMENT IN THE US AND THE KEY ISSUES FACING MUNICIPAL SEWAGE MANAGERS. CONVENTIONAL SEWAGE TREATMENT SYSTEMS ARE OUTLINED AND ALTERNATIVE AND INNOVATION TECHNOLOGIES ARE INTRODUCED. CASE STUDIES PRESENT THE EXPERIENCES OF FIVE MUNICIPAL SYSTEMS: THE TECHNOLOGIES INVOLVED, THE COSTS, THE PROJECT PROBLEMS AND SUBSEQUENT SOLUTIONS, THE ENERGY CONSIDERATIONS, AND THE CURRENT STATUS OF EACH PROJECT. SOME OF THE LESSONS LEARNED AND FUTURE POSSIBILITIES FOR THE APPLICATION OF APPROPRIATE TECHNOLOGIES TO SEWAGE TREATMENT AND CONVERSION ARE REVIEWED. EACH CHAPTER INCLUDES A GLOSSARY AND ABBREVIATION LIST, REFERENCE SOURCES, AND A LIST OF AGENCIES AND PEOPLE WHO CAN PROVIDE FURTHER ASSISTANCE. (ERA CITATION 08:049454).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010361

PUBLICATION DATE: 84

TITLE: SELECTED WATER RESOURCES ABSTRACTS, VOLUME 17, NUMBERS 1-12.

DESCRIPTOR: *ABSTRACTS; *CONSERVATION; *MANAGEMENT; *NATURAL RESOURCES; *WATER; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: $100.00-SUBSCRIPTION FOR 1 YEAR. PRICE CODE: PB84-910200.

ABSTRACT: SELECTED WATER RESOURCES ABSTRACTS, A MONTHLY JOURNAL, INCLUDES ABSTRACTS OF CURRENT AND EARLIER PERTINENT MONOGRAPHS, JOURNAL ARTICLES, REPORTS, AND OTHER PUBLICATION FORMATS. THESE DOCUMENTS COVER WATER RESOURCES AS TREATED IN THE LIFE, PHYSICAL, AND SOCIAL SCIENCES AND THE RELATED ENGINEERING AND LEGAL ASPECTS OF THE CHARACTERISTICS, SUPPLY CONDITION, CONSERVATION, CONTROL, USE, OR MANAGEMENT OF WATER RESOURCES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010362
PUBLICATION DATE: SEP 83

TITLE: ALGAE: CONTROL AND GROWTH IN LAKES AND STREAMS. 1977-SEPTEMBER, 1983 (CITATIONS FROM THE SELECTED RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ALGAE; *BIOLOGICAL CONTROL; *HERBICIDES; *LAGOONS; *LAKES; *RIVERS; *STREAMS

DESCRIPTIVE NOTE: 163P. PRICE CODE: PC N01/MF N01. PB83-873182.

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE GROWTH AND CONTROL OF ALGAL GROWTH IN LAKES, STREAMS, RIVERS, AND MANMADE LAGOONS. BIOLOGICAL AND CHEMICAL CONTROL OF ALGAL BLOOMS ARE CONSIDERED AND THEIR ADVANTAGES AND DISADVANTAGES ARE DISCUSSED. BIOLOGICAL CONTROL METHODS, INCLUDING REGULATION OF NUTRIENTS, O2 AND N2, PREDATION BY FISH, PLANKTON, SNAILS AND THE USE OF VIRUSES, BACTERIA, AND FUNGI ARE CONSIDERED. THE USE OF HERBICIDES IS ALSO DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 123 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010363

PUBLICATION DATE: JUN 83

TITLE: GROUNDWATER CONTAMINATION RESPONSE GUIDE. VOLUME 1. METHODOLOGY.

PERSONAL AUTHOR: GUSWA, J. H.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ASSESSMENT; *CONTAMINATION; *GROUNDWATER; *FIELD STUDIES; *RESPONSE GUIDES; *SAMPLING; *WATER QUALITY

DESCRIPTIVE NOTE: 46P. PRICE CODE: PL A03/MF A01. AD-A131045/7.

ABSTRACT: THIS REPORT DOCUMENTS AN OVERVIEW OF GROUNDWATER HYDROLOGY AND A CURRENT TECHNOLOGY REVIEW OF EQUIPMENT, METHODS, AND TECHNIQUES USED IN GROUNDWATER FIELD INVESTIGATIONS. IN VOLUME I; 'METHODOLOGY', AN ASSESSMENT METHODOLOGY, FOR INVESTIGATING AND EVALUATING KNOWN OR SUSPECTED INSTANCES OF CONTAMINATED GROUNDWATER IS DESCRIBED. THE METHODOLOGY PROVIDES A STARTING POINT FROM WHICH INFORMATION GATHERING AND DATA COLLECTION ACTIONS CAN BE INITIATED. WHILE RESPONSE ACTIONS REMAIN SITE-DEPENDENT, A GENERAL AND LOGICAL APPROACH TO FIELD ACTIVITIES IS PRESENTED. AN INTRODUCTORY SUMMARY OF FIELD INVESTIGATIVE METHODS AND ANALYTICAL TECHNIQUES, WITH DATA INTEGRATION STEPS, APPRISES INSTALLATION ENGINEERS OF THE COMPLEXITIES OF FIELD PROGRAMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010364
PUBLICATION DATE: MAY 83

TITLE: METHODS FOR DETECTING COLIFORM ORGANISMS.

PERSONAL AUTHOR: NISHIOKA, K.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BACTERIA; *COLIFORM BACTERIA; *LABORATORY PROCEDURES; *MICROBIOLOGY

DESCRIPTIVE NOTE: 10P. PATENT-4386157. PRICE: $1.00.

ABSTRACT: A METHOD AND APPARATUS ARE DISCLOSED FOR DETERMINING THE CONCENTRATION OF COLIFORM BACTERIA IN A SAMPLE. THE SAMPLE CONTAINING THE COLIFORM BACTERIA IS CULTURED IN A LIQUID GROWTH MEDIUM. THE CULTURED BACTERIA PRODUCE HYDROGEN AND THE HYDROGEN IS VENTED TO A SECOND CELL CONTAINING A BUFFER SOLUTION IN WHICH THE HYDROGEN DISSOLVES. BY MEASURING THE POTENTIAL CHANGE IN THE BUFFER SOLUTION CAUSED BY THE HYDROGEN, AS A FUNCTION OF TIME, THE INITIAL CONCENTRATION OF BACTERIA IN THE SAMPLE IS DETERMINED. ALTERNATIVELY, THE POTENTIAL CHANGE IN THE BUFFER SOLUTION CAN BE COMPARED WITH THE POTENTIAL CHANGE IN THE LIQUID GROWTH MEDIUM TO VERIFY THAT THE POTENTIAL CHANGE IN THE LIQUID GROWTH MEDIUM IS PRODUCED PRIMARILY BY THE HYDROGEN GAS PRODUCED BY THE COLIFORM BACTERIA.

AVAILABILITY: COMMISSIONER OF PATENTS, WASHINGTON, DC 20231

IRIS ACCESSION NUMBER: EW010365

PUBLICATION DATE: SEP 83

TITLE: POLYELECTROLYTES: WASTEWATER AND SEWAGE TREATMENT. 1977-SEPTEMBER, 1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *POLYELECTROLYTES; *RESEARCH REPORTS; *SEPARATION TECHNIQUES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 145P. PRICE CODE: PC N01/MF N01. PB83-872788.

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING POLYELECTROLYTES IN WASTEWATER AND SEWAGE TREATMENT. TOPICS INCLUDE FLOCCULATION, COAGULATION, SEPARATION TECHNIQUES, POLLUTANT IDENTIFICATION, WATER POLLUTION SOURCES, SLUDGE DEHYDRATION, REMOVAL OF COLOR AND SOLID SUSPENSIONS, AND DESALINATION PROCESSES. VIRUS DETECTION AND REMOVAL, HOSPITAL WASTEWATER PROCESSING, METHODS OF SYNTHESIZING POLYELECTROLYTE COMPLEXES, AND PERFORMANCE EVALUATION OF POLYELECTROLYTES ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 121 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010366
PUBLICATION DATE: JUN 83

TITLE: CHLORINE 'DISINFECTION' CHEMISTRY OF AROMATIC COMPOUNDS. POLYNUCLEAR AROMATIC HYDROCARBONS: RATES, PRODUCTS, AND MECHANISMS.

PERSONAL AUTHOR: OYLER, A. R.; AND OTHERS

DESCRIPTOR: *AROMATIC HYDROCARBONS; *CHLORINE; *CHEMISTRY; *CHEMICAL REACTIONS; *ORGANIC COMPOUNDS; *RESEARCH REPORTS

DESCRIPTIVE NOTE: 334-342P.

ABSTRACT: THE USE OF CHLORINE FOR WATER RENOVATION AND DISINFECTION HAS BEEN QUESTIONED BECAUSE OF THE REACTION OF ACTIVE CHLORINE SPECIES WITH ORGANIC COMPOUNDS PRESENT IN WATER TO FORM PRODUCTS THAT MAY BE BIOLOGICALLY HARMFUL. DESCRIBED IS A DETAILED STUDY OF THE KINETICS AND PRODUCT DISTRIBUTIONS OF PHENANTHRENE IN THE PH RANGE 3-10 AND FUORENE AND FLUORANTHENE IN THE PH RANGE 3-5.

AVAILABILITY: PUBLISHED IN ENVIRONMENTAL SCIENCE AND TOXICOLOGY, V17 N6

IRIS ACCESSION NUMBER: EW010367

PUBLICATION DATE: AUG 83

TITLE: RURAL MARYLAND: PILOT WASTEWATER PROJECT.

DESCRIPTOR: *MARYLAND; *PILOT PROJECTS; *PUBLIC HEALTH; *RURAL AREAS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 48P. PRICE CODE: PC A03/ MF A01. PB84-102136.

ABSTRACT: THE OBJECT OF THIS PROJECT WAS TO FINANCIALLY ASSIST ONE SMALL RURAL MARYLAND TOWN FOR THE PURPOSE OF ALLEVIATING THE PROBLEM THAT HAD CAUSED THE TOWN TO BE PLACED UNDER A WASTEWATER MORATORIUM BY THE STATE HEALTH DEPARTMENT. MRDC BELIEVED THAT THIS PILOT PROJECT COULD ACT AS A PROTOTYPE FOR OTHER RURAL TOWNS TO FOLLOW WHICH EXPERIENCE SIMILAR PROBLEMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010368

PUBLICATION DATE: JUN 83

TITLE: CONSTRUCTION COSTS FOR MUNICIPAL WASTEWATER TREATMENT PLANTS 1973-1982.

DESCRIPTOR: *CONSTRUCTION COSTS; *COSTS; *FACILITIES; *MUNICIPALITIES; *RESEARCH REPORTS; *TRENDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 259P. PRICE CODE: PC A12/MF A01. PB84-102573.

ABSTRACT: THIS REPORT PRESENTS THE RESULTS OF A STUDY OF THE COSTS FOR CONSTRUCTION OF MUNICIPALLY OWNED WASTEWATER TREATMENT FACILITIES. THE COST DATA UTILIZED IN THIS STUDY WERE EXTRACTED FROM WINNING BID DOCUMENTS OF PROJECTS BUILT WITH FUNDS PROVIDED BY THE CONSTRUCTION GRANTS PROGRAM OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA). ONLY FACILITIES FUNDED UNDER THE FEDERAL WATER POLLUTION CONTROL ACT (PL 92-500) AND IT'S AMENDED VERSIONS ARE A PART OF THIS STUDY. ALL DATA WERE OBTAINED DIRECTLY FROM THE CONSTRUCTION GRANTS PROGRAM FILES AT EITHER EPA REGIONAL OFFICES OR THE OFFICES OF STATES WHICH HAVE BEEN DELEGATED GRANT PROGRAM RESPONSIBILITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010369

PUBLICATION DATE: AUG 83

TITLE: NEW AND REVISED CHEMICAL FATE TEST GUIDELINES.

DESCRIPTOR: *CHEMICALS; *CHEMICAL FATE TESTS; *EPA; *GUIDELINES; *REGULATIONS

DESCRIPTIVE NOTE: 486P. PRICE CODE: PC$25.00/MF A01. PB-83-257717.

ABSTRACT: THESE DOCUMENTS CONSTITUTE A SET OF 2 NEW CHEMICAL FATE TEST GUIDELINES AND SUPPORT DOCUMENTS THAT WILL BE ADDED TO THE CHEMICAL FATE TEST GUIDELINES AND SUPPORT DOCUMENTS THAT HAD BEEN PUBLISHED BY NTIS IN OCTOBER, 1982. THERE IS ALSO A MAJOR REVISION OF ONE TEST GUIDELINE AND SUPPORT DOCUMENT AND MINOR REVISIONS OF 4 TEST GUIDELINES AND SUPPORT DOCUMENTS THAT HAD APPEARED IN THE OCTOBER, 1982 PUBLICATION. THESE REVISIONS WERE MADE IN RESPONSE TO PUBLIC COMMENTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010370

PUBLICATION DATE: APR 83

TITLE: WORKSHOP ON EFFECTS OF ENVIRONMENTAL REGULATION ON INDUSTRIAL COMPLIANCE COSTS AND TECHNOLOGICAL INNOVATION HELD AT WASHINGTON, DC. ON SEPTEMBER 10-11, 1981: SUMMARY AND PAPERS.

DESCRIPTOR: *COMPLIANCE; *COSTS; *ENVIRONMENTAL REGULATION; *INDUSTRIAL COMPLIANCE; *REGULATIONS; *TECHNOLOGY

DESCRIPTIVE NOTE: 193P. PRICE CODE: PC A09/MF A01. PB 84-100601.

ABSTRACT: THREE PAPERS DELIVERED AT THE WORKSHOP ARE PRESENTED. THE PAPERS ADDRESS SUCH TOPICS AS THE EFFECTS OF TECHNOLOGICAL INNOVATION AND REGULATORY DESIGN ON REGULATORY COMPLIANCE COSTS, APPROACHES TO ESTIMATING COMPLIANCE COSTS FOR INDUSTRY, AND THE FEDERAL EXPERIENCE WITH THE AUTOMOBILE INDUSTRY. FACTORS THAT WOULD RESULT IN BOTH UNDERESTIMATION AND OVERESTIMATION OF COSTS ARE CONSIDERED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010371

PUBLICATION DATE: APR 83

TITLE: WORKSHOP ON EFFECTS OF ENVIRONMENTAL REGULATION ON INDUSTRIAL COMPLIANCE COSTS AND TECHNOLOGICAL INNOVATION HELD AT WASHINGTON, DC. ON SEPTEMBER 10-11, 1981: EDITED PROCEEDINGS.

DESCRIPTOR: *COMPLIANCE; *COSTS; *ENVIRONMENTAL REGULATION; *INDUSTRIAL COMPLIANCE; *REGULATIONS; *TECHNOLOGY

DESCRIPTIVE NOTE: 200P. PRICE CODE: PC A09/MF A01. PB 84-100619.

ABSTRACT: WORKSHOP PARTICIPANTS FOCUSED ON FOUR QUESTIONS: (1) CAN EXISTING METHODS PROVIDE RELIABLE ESTIMATES OF THE COSTS OF PARTICULAR REGULATIONS; (2) DO THESE METHODS TEND TO OVERESTIMATE OR UNDERESTIMATE REGULATORY COSTS; (3) CAN THE AGGREGATE COSTS OF GOVERNMENT REGULATION BE MANAGED; AND (4) WHAT ARE THE IMPLICATIONS FOR THOSE CHARGED WITH IMPLEMENTING A CENTRAL REGULATORY SYSTEM. WORKSHOP PARTICIPANTS AGREED THAT THERE ARE GAPS IN DATA AND A LACK OF ACCEPTABLE METHODOLOGY TO PROVIDE VALID COST ESTIMATES FOR INDIVIDUAL REGULATIONS, INDUSTRIAL SECTORS, OR THE ECONOMY AS A WHOLE. THEY CONCLUDED THAT THE ESTIMATION OF THE COST OF ENVIRONMENTAL REGULATION IS STILL IN THE EXPERIMENTAL STAGE, AS IS THE ESTIMATION OF BENEFITS. IT WAS SUGGESTED THAT THE OFFICE OF MANAGEMENT AND BUDGET FUNCTION IN THREE ROLES: (1) AS AN ADVOCATE FOR EFFICIENCY; (2) AS A CHALLENGER OF AGENCIES' PROGRAMS AND PROPOSALS; AND (3) AS AN ADVOCATE FOR METHODOLOGICAL IMPROVEMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010372

PUBLICATION DATE: AUG 83

TITLE: DRAFT ENVIRONMENTAL IMPACT STATEMENT: WASTEWATER TREATMENT FACILITIES, JEFFERSON PARISH (WEST BANK) LOUISIANA (SUPPLEMENTAL).

DESCRIPTOR: *ENVIRONMENTAL IMPACT STATEMENTS; *EVALUATION; *FACILITIES; *LOUISIANA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 116P. PRICE CODE: PC A06/MF A01. PB84-103787.

ABSTRACT: JEFFERSON PARISH HAS DEVELOPED A NEW ALTERNATIVE FOR MAKING IMPROVEMENTS TO ITS WASTEWATER TREATMENT FACILITIES ON THE WEST BANK. THEIR PREFERRED ALTERNATIVE CONSISTS OF RENOVATING AND EXPANDING THE THREE LARGEST TREATMENT PLANTS--BRIDGE CITY, HARVEY, AND MARRERO--WITH PARISH GENERATED FUNDS. THIS SUPPLEMENT PROVIDES AN ENVIRONMENTAL EVALUATION OF THE PARISH'S PREFERRED ALTERNATIVE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010373

PUBLICATION DATE: JUN 83

TITLE: GROUNDWATER CONTAMINATION RESPONSE GUIDE. VOLUME 2. DESK REFERENCE.

PERSONAL AUTHOR: GUSWA, J. H.; AND OTHERS

DESCRIPTOR: *CONTAMINATION; *EQUIPMENT; *GROUNDWATER; *FIELD METHODS; *GUIDELINES; *HYDROLOGY; *RESPONSE GUIDES; *TECHNOLOGY; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 325P. PRICE CODE: PC A14/MF A01. AD-A131 129/9.

ABSTRACT: A COMPREHENSIVE SURVEY OF TECHNICAL WORKS RESULTED IN THIS COMPILATION OF GROUNDWATER FUNDAMENTALS AND FIELD INVESTIGATION ACTIVITIES. TOPICAL COVERAGE RANGES FROM HYDROLOGY BASICS TO STATE-OF-THE-ART EQUIPMENT AND FIELD METHODS. SUFFICIENT MATERIAL IS PRESENTED TO ACQUAINT THE READER WITH BASIC CONCEPTS AND FUNDAMENTALS OF GROUNDWATER AND WATER QUALITY ISSUES. NUMEROUS ILLUSTRATIONS HIGHLIGHT THESE ITEMS. AN APPLICATIONS-ORIENTED REVIEW OF FIELD METHODS IDENTIFIES EQUIPMENT TYPES AND LIMITATIONS. THE ESSENTIALS OF GEOPHYSICS, DRILLING METHODS, WELL CONSTRUCTION, AND SAMPLING ARE ADDRESSED, WITH EMPHASIS ON INTEGRATING INFORMATION IN AN ITERATIVE PROCESS TO DEVISE A COST-EFFECTIVE PROGRAM. A REVIEW OF CONTAMINANT TRANSPORT IN GROUNDWATER IDENTIFIES SIGNIFICANT PARAMETERS AND PHYSICAL SYSTEMS OF CONCERN. FINALLY, A SUMMARY OF GROUNDWATER TREATMENT METHODS PROVIDES AN OPTIONS LIST FOR POTENTIAL USE. THE REPORT CONCLUDES WITH AN AGENCY ADDRESS DIRECTORY FOR WATER QUALITY INFORMATION AND SOME REPRESENTATIVE COST SCHEDULES FOR FIELD ACTIVITIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010374

PUBLICATION DATE: AUG 83

TITLE: WASTEWATER TREATMENT. JUNE, 1970-AUGUST, 1983 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *EFFLUENTS; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *RECYCLING; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 163P. PRICE CODE: PC N01/MF N01. PB83-871368.

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING METHODS AND TECHNOLOGY FOR THE TREATMENT AND PURIFICATION OF INDUSTRIAL EFFLUENTS AND THE RECYCLING OF VARIOUS EFFLUENT COMPONENTS. EFFLUENTS FROM MINING AND RELATED ACTIVITIES ARE EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 166 CITATIONS, 23 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010375

PUBLICATION DATE: 83

TITLE: A MANUAL OF TECHNICAL PROCEDURE FOR RURAL WATER SUPPLY AND SANITATION.

PERSONAL AUTHOR: HAZBUN, J. A.; TIMAR, G. S.

DESCRIPTOR: *FACILITIES; *INSTALLATION; *MANUALS; *PACIFIC ISLANDS; *RURAL AREAS; *SANITATION; *SOLOMAN ISLANDS; *TRAINING; *WATER SUPPLY; *WATER SOURCES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 230P.

ABSTRACT: THIS BOOK IS INTENDED AS A MANUAL FOR PEOPLE INSTALLING WATER SUPPLIES AND SANITATION ON SMALL ISLANDS IN THE PACIFIC BUT WILL BE OF ASSISTANCE TO OTHERS WORKING IN SMALL RURAL COMMUNITIES. SECTIONS INCLUDE: (1) WATER SOURCES, (2) SURVEYING AND PERCOLATION TESTS, (3) DESIGN OF SUPPLY SYSTEMS, AND (4) SANITATION.

AVAILABILITY: WHO PUBLICATIONS, 39 SHERIDAN AVENUE, ALBANY, NY 12210

IRIS ACCESSION NUMBER: EW010377

PUBLICATION DATE: 82

TITLE: ENVIRONMENTALLY-SOUND SMALL-SCALE WATER PROJECTS: GUIDELINES FOR PLANNING.

PERSONAL AUTHOR: TILLMAN, GUS

DESCRIPTOR: *COMMUNITY DEVELOPMENT; *DRINKING WATER; *GUIDELINES; *DEVELOPING COUNTRIES; *IRRIGATION; *PLANNING; *RURAL AREAS; *WATER PROJECTS; *WATER QUALITY; *WATER SUPPLY

DESCRIPTIVE NOTE: 140P.

ABSTRACT: THIS BOOK IS FOR COMMUNITY DEVELOPMENT WORKERS IN DEVELOPING COUNTRIES WHO ARE NOT TECHNICIANS IN THE AREA OF WATER RESOURCES. IT COVERS A VARIETY OF GUIDELINES AND PLANNING FOR WATER SUPPLY FOR DRINKING WATER AND FOR IRRIGATION.

AVAILABILITY: COORDINATION IN DEVELOPMENT (CODEL) IN VOLUNTEERS IN TECHNICAL ASSISTANCE (VITA), 3706 RHODE ISLAND AVENUE, MT. RANIER, MD 20822

IRIS ACCESSION NUMBER: EW010380

PUBLICATION DATE: 83

TITLE: METERING PUMPS: SELECTION AND APPLICATION.

PERSONAL AUTHOR: POYNTON, J. P.

DESCRIPTOR: *DESIGN; *INSTRUCTIONAL MATERIALS; *OPERATIONS; *METERING PUMPS; *POST SECONDARY EDUCATION; *PUMPS; *SELECTION; *TROUBLESHOOTING

DESCRIPTIVE NOTE: 194P. PRICE: $29.75.

ABSTRACT: THIS ILLUSTRATED AND INDEXED TEXT COVERS SELECTION, APPLICATION, AND OPERATION OF VARIOUS METERING PUMP DESIGNS. DETAILS REGARDING ACCESSORIES AND CONTROL SYSTEMS FOR PUMPS ARE INCLUDED, ALONG WITH DISCUSSIONS OF CHEMICAL FEED SYSTEMS AND INSTALLATION. A CHART FOR TYPICAL TROUBLE-SHOOTING AND SOME GUIDELINES FOR MAINTENANCE ARE ALSO PROVIDED.

AVAILABILITY: MARCEL DEKKER, INC., 270 MADISON AVE., NEW YORK, NY 10016

IRIS ACCESSION NUMBER: EW010381

PUBLICATION DATE: 83

TITLE: PROCEEDINGS OF THE SEMINAR ON DEVELOPMENT AND ASSESSMENT OF ENVIRONMENTAL QUALITY STANDARDS.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DISSOLVED OXYGEN; *ENVIRONMENTAL QUALITY; *STANDARDS; *TRIHALOMETHANES; *WATER QUALITY

DESCRIPTIVE NOTE: 135P. PRICE: $12.00.

ABSTRACT: THE PAPERS PRESENTED AT THIS SEMINAR WERE CONCERNED WITH THE DESIRABLE CHARACTERISTICS OF ENVIRONMENTAL QUALITY STANDARDS AND GENERAL CONSIDERATIONS INVOLVED IN THEIR DEVELOPMENT. THE PROCEEDINGS INCLUDE DISCUSSIONS OF STANDARDS FOR TOTAL TRIHALOMETHANES AND PROMULGATED CRITERIA FOR DISSOLVED OXYGEN AND TRICHLOROETHYLENE. THE PROCEEDINGS ARE SUPPLEMENTED WITH A REPORT BY THE AMERICAN ACADEMY OF ENVIRONMENTAL ENGINEERS' COMMITTEE ON CONCEPTS FOR DEVELOPING ENVIRONMENTAL QUALITY STANDARDS THAT SUMMARIZES DEFINITIONS, APPLICABLE STANDARDS-RELATED SECTIONS OF THE CLEAN WATER, CLEAN AIR, AND SAFE DRINKING WATER ACTS, AND PRINCIPLES RECOMMENDED AS USEFUL IN STANDARDS DECISION MAKING.

AVAILABILITY: AMERICAN ACADEMY OF ENVIRONMENTAL ENGINEERS, P.O. BOX 269, ANNAPOLIS, MD 21404

IRIS ACCESSION NUMBER: EW010383

PUBLICATION DATE: 82

TITLE: VILLAGE HANDPUMP TECHNOLOGY: RESEARCH AND EVALUATION IN ASIA.

PERSONAL AUTHOR: SHARP, D.; GRAHAM, M.

DESCRIPTOR: *ASIA; *CASE STUDIES; *HANDPUMPS; *DRINKING WATER; *PERFORMANCE EVALUATION; *PUMPS; *RURAL AREAS; *WATER SUPPLY; *TECHNOLOGY

DESCRIPTIVE NOTE: 72P. PRICE: $4.00.

ABSTRACT: THE INTERNATIONAL DEVELOPMENT RESEARCH CENTRE HAS SUPPORTED PROJECTS FOR DEVELOPING AND USING RELIABLE HANDPUMPS THAT CAN BE LOCALLY PRODUCED, INSTALLED, AND MAINTAINED AT A REASONABLE COST. FIELD EXPERIENCES WITH PROJECTS IN SRI LANKA, THAILAND, THE PHILIPPINES, AND MALAYSIA ARE SUMMARIZED IN THIS PUBLICATION. THE TECHNOLOGY FOR DEVELOPING MORE EFFECTIVE PUMP SYSTEMS FOR RURAL WATER SUPPLIES IS APPLICABLE TO RURAL SITUATIONS WORLDWIDE. AN OVERVIEW OF TECHNICAL PERFORMANCE AND A REPORT OF ECONOMIC ANALYSIS AND POTENTIAL MARKETS ARE ALSO INCLUDED.

AVAILABILITY: UNIPUB, P.O. BOX 433, MURRAY HILL STATION, NEW YORK, NY 10016

IRIS ACCESSION NUMBER: EW010384

PUBLICATION DATE: 82

TITLE: BULKING OF ACTIVATED SLUDGE: PREVENTATIVE AND REMEDIAL METHODS.

PERSONAL AUTHOR: CHAMBERS, B.; TOMLINSON, E. J.

DESCRIPTOR: *ACTIVATED SLUDGE; *BULKING; *INSTRUCTIONAL MATERIALS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SLUDGE; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 279P. PRICE: $69.95.

ABSTRACT: POOR SLUDGE SETTLEABILITY IN AN ACTIVATED-SLUDGE PLANT CAN LEAD TO A FINAL EFFLUENT THAT HAS A HIGH SOLIDS CONTENT. THIS IN TURN CAN ADVERSELY AFFECT THE QUALITY OF THE RECEIVING WATER. THE CONTRIBUTIONS IN THIS BOOK COVER VARIOUS ASPECTS OF THE PROBLEM WITH BULKING SLUDGE: A HISTORICAL BACKGROUND, STATEMENTS ON THE CURRENT SITUATION, THE MICROBIOLOGY OF THE ACTIVATED-SLUDGE PROCESS, AND RESULTS OF PILOT- AND FULL-SCALE INVESTIGATIONS.

AVAILABILITY: HALSTED PRESS, JOHN WILEY AND SONS, INC., 605 THIRD AVE., NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010385
PUBLICATION DATE: 83

TITLE: STEEL WATER STORAGE TANKS: WHAT ENGINEERS AND UTILITIES NEED TO KNOW.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DRINKING WATER; *DESIGN; *INSPECTION; *MAINTENANCE; *STORAGE TANKS; *STEEL TANKS; *WATER STORAGE; *WATER SUPPLY

DESCRIPTIVE NOTE: PRICE: $8.15 MEMBERS; $10.20 NONMEMBERS.

ABSTRACT: THIS IS A COLLECTION OF PAPERS PRESENTED AT THE AWWA ANNUAL CONFERENCE JUNE 5-9, 1983 IN LAS VEGAS, NEV. WRITTEN BY EXPERTS IN THEIR FIELD, THE ARTICLES CONTAINED IN THIS HANDBOOK INCLUDE: (1) SELECTING AND SIZING TANKS; (2) SPECIFYING AWWA STEEL WATER STORAGE TANKS; (3) DESIGN OF WELDED STEEL TANKS FOR WATER STORAGE; (4) INSPECTING NEW TANKS CONSTRUCTION; (5) TANK PAINT SYSTEMS-SELECTION, APPLICATION AND INSPECTION; (6) CATHODIC PROTECTION OF WATER STORAGE TANKS; AND (7) FACTORY COATED BOLTED STEEL TANKS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, DATA PROCESSING DEPT., 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010386

PUBLICATION DATE: 83

TITLE: DUAL WATER SYSTEMS.

DESCRIPTOR: *CONSTRUCTION; *DISTRIBUTION SYSTEMS; *DUAL DISTRIBUTION SYSTEMS; *DESIGN; *DRINKING WATER; *EVALUATION; *GUIDELINES; *MANUALS; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 64P. PRICE: $9.10 MEMBERS; $11.40 NONMEMBERS.

ABSTRACT: DIMINISHING WATER SUPPLIES AND INCREASING COSTS OF WATER/WASTEWATER TREATMENT ARE RESULTING IN PREDICTIONS THAT DUAL DISTRIBUTION SYSTEMS MAY SOON BECOME COMMON PRACTICE. THIS MANUAL COVERS: (1) SITUATIONS WHERE A DUAL WATER SYSTEM COULD BE BENEFICIAL; (2) ANALYZING WATER DEMAND; (3) DESIGNING AND CONSTRUCTING A DUAL SYSTEM; AND (4) GUIDELINES FOR INSTALLING A DUAL DISTRIBUTION SYSTEM. IN ADDITION, THE BOOK COVERS DOZENS OF OTHER TOPICS BASIC TO UNDERSTANDING THE PROS AND CONS OF DUAL DISTRIBUTION SYSTEMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, DATA PROCESSING DEPT., 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010388

PUBLICATION DATE: JUN 83

TITLE: THE POTENTIAL FOR WATER YIELD AUGMENTATION THROUGH FOREST AND RANGE MANAGEMENT.

PERSONAL AUTHOR: PONCE, STANLEY L.
DESCRIPTOR: *ECONOMICS; *FORESTS; *LAND USE; *MANGEMENT; *PLANNING; *POLICIES; *RANGELAND; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: PRICE: $7.50.

ABSTRACT: THIS PUBLICATION PROVIDES INFORMATION ON THE POTENTIAL FOR AUGMENTING WATER SUPPLY THROUGH FOREST AND RANGELAND MANAGEMENT. IT DRAWS TOGETHER THOUGHTFUL REVIEWS BY EXPERTS FROM THE FORESTED LANDS OF THE EAST, WEST, AND NORTHWEST TO THE RANGELANDS OF THE SOUTHWEST, WHO EXPLORE THE OPPORTUNITIES FOR INCREASING WATER SUPPLIES IN THEIR REGIONS WITHIN THE FRAMEWORK OF RATIONAL LAND MANAGEMENT. A PAPER EXPLORING THE ECONOMIC QUESTIONS INVOLVED IN JOINT WATER AND TIMBER PRODUCTION, AND AN EXPLORATION OF POTENTIALS AND PROBLEMS FOR THE FUTURE ROUND OUT THE VOLUME.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410 GROSVENOR LANE, SUITE 220, BETHESDA, MD 20814

IRIS ACCESSION NUMBER: EW010389

PUBLICATION DATE: 82

TITLE: PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON HYDROMETEOROLOGY.

PERSONAL AUTHOR: JOHNSON, A. IVAN; CLARK, ROBERT A.

DESCRIPTOR: *ACID RAIN; *CONFERENCE PROCEEDINGS; *DATA ACQUISITION; *HYDROMETEOROLOGY; *FORECASTING; *CLIMATE; *INSTRUMENTATION; *MODELING; *PLANNING; *WATER RESOURCES; *WATER SUPPLY; *WEATHER MODIFICATION

DESCRIPTIVE NOTE: 598P. PRICE: $49.00.

ABSTRACT: THE 93 PAPERS IN THIS PROCEEDINGS VOLUME PROVIDE BACKGROUND MATERIAL FOR THE MANY APPLICATIONS OF HYDROMETEOROLOGY BY BOTH METEOROLOGISTS AND ENGINEERS. THEY ILLUSTRATE THE DIVERSE INTERESTS OF THE SEVERAL PARTICIPATING SOCIETIES AND OF THE NUMEROUS SCIENTISTS FROM THE FEDERAL, STATE, UNIVERSITY, AND PRIVATE SECTORS. THIS VOLUME IS ORGANIZED INTO EIGHT SECTIONS THAT DEAL WITH THE FOLLOWING VARIOUS PROGRAM AREAS RELATED TO HYDROMETEOROLOGY: (1) INSTRUMENTATION AND DATA ACQUISITION; (2) HYDROLOGIC MODELING AND FORECASTING; (3) WATER SUPPLY AND WATER RESOURCES; (4) LONG-TERM PLANNING FOR WATER QUALITY; (5) DROUGHT AND CLIMATE; (6) WEATHER MODIFICATION; (7) ACID RAIN; AND (8) PROBABLE MAXIMUM PRECIPITATION AND FREQUENCY FOR DESIGN.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410 GROSVENOR LANE, SUITE 220, BETHESDA, MD 20814

IRIS ACCESSION NUMBER: EW010391
PUBLICATION DATE: 83

TITLE: GROUNDWATER - OUT OF SIGHT, NOT OUT OF DANGER.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONTAMINATION; *GROUNDWATER; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; *MANAGEMENT; *NATURAL RESOURCES; *POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 18 MINUTE SLIDE/TAPE SHOW FREE ON LOAN. AVAILABLE FOR PURCHASE: NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, 607 BOYLSTON STREET, BOSTON, MA 02116. PRICE: $75.00

ABSTRACT: THIS SLIDE/TAPE SHOW EXPLAINS THE IMPORTANCE OF GROUNDWATER AS A RESOURCE, BASIC HYDROLOGIC CONCEPTS, COMMON SOURCES OF CONTAMINATION IN THE NORTHEAST, A GENERAL MANAGEMENT STRATEGY AND PROTECTION ALTERNATIVES. THE SHOW WAS PRODUCED IN 1983 BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION PRIMARILY FOR USE AS A PUBLIC INFORMATION TOOL BY THE NORTHEAST STATE ENVIRONMENTAL AGENCIES, FOR USE AS AN INTRODUCTION TO PUBLIC PRESENTATIONS OF A PARTICULAR STATE'S GROUNDWATER MANAGEMENT SYSTEM. THE SHOW IS ALSO INTENDED FOR GENERAL DISTRIBUTION AND USE.

AVAILABILITY: NEW ENGLAND REGIONAL WASTEWATER INSTITUTE, 2 FORT ROAD, SOUTH PORTLAND, ME 04106

IRIS ACCESSION NUMBER: EW010392

PUBLICATION DATE: 83

TITLE: A CAUSE FOR ALARM - UPDATE, ACID PRECIPITATION IN THE NORTHEAST.

DESCRIPTOR: *ACID PRECIPITATION; *AUDIOVISUAL AIDS; *ECONOMICS; *ENVIRONMENTAL IMPACTS; *INSTRUCTIONAL MATERIALS; *NORTHEAST UNITED STATES; *POLICIES; *PUBLIC HEALTH; *POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 30 MINUTE SLIDE/TAPE SHOW. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, 607 BOYLSTON STREET, BOSTON, MA 02116. (PURCHASE PRICE: $75.00).

ABSTRACT: THIS SLIDE/TAPE SHOW EXPLAINS THE PHENOMENON OF ACID RAIN, THE SPECIAL VULNERABILITY OF THE NORTHEAST, THE REGIONAL EFFECTS ON AQUATIC AND TERRESTRIAL ECOSYSTEMS, DRINKING WATER SUPPLIES, MATERIALS, VISIBILITY, AND HUMAN HEALTH. ALSO EXPLAINED ARE THE SOURCES OF ACID PRECIPITATION, THE LONG RANGE TRANSPORT PROCESS, AND THE NEED FOR CONTROL MEASURES.

AVAILABILITY: NEW ENGLAND REGIONAL WASTEWATER INSTITUTE, 2 FORT ROAD, SOUTH PORTLAND, ME 04106 (FREE ON LOAN)

IRIS ACCESSION NUMBER: EW010394
PUBLICATION DATE: 83

TITLE: SAFE HANDLING OF WATER TREATMENT CHEMICALS, A SAFETY TRAINING PACKAGE.

DESCRIPTOR: *ACCIDENT PREVENTION; *AUDIOVISUAL AIDS; *CHEMICALS; *FIRST AID; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *SAFETY; *WATER TREATMENT

DESCRIPTIVE NOTE: COLOR SLIDE PRESENTATION; PRICE: $65.00 MEMBERS; $81.25 NONMEMBERS.

ABSTRACT: AWWA'S SAFETY TRAINING PACKAGE COMES WITH FULL-COLOR SLIDES, SCRIPT, SESSION OUTLINE, HANDOUTS, PRETEST QUESTIONS, SELECTED REFERENCES AND BIBLIOGRAPHY. THE PACKAGE COVERS: (1) PROTECTIVE CLOTHING AND EQUIPMENT; (2) FACILITIES AND PROCEDURES FOR CHEMICAL STORAGE; (3) VENTILATION EQUIPMENT; (4) SAFETY EQUIPMENT; AND (5) FIRST AID.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, DATA PROCESSING DEPT., 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010395

PUBLICATION DATE: 82

TITLE: SURFACE WATER.

PERSONAL AUTHOR: BOWIN, ROBERT

DESCRIPTOR: *HYDROLOGIC CYCLE; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; *POSTSECONDARY EDUCATION; *SURFACE WATER; *WATER; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 290P. PRICE: $54.95.

ABSTRACT: THE INCREASED WORLD DEMAND FOR WATER OF SATISFACTORY PURITY LAYS BARE THE INTERRELATIONSHIPS BETWEEN THE WATERS OF THE EARTH, THEIR OCCURRENCE, CIRCULATION, DISTRIBUTION AND THE EASE WITH WHICH THEY MAY BE POLLUTED. THIS REFERENCE PROVIDES A BROAD SURVEY OF THE WATER RESOURCES ABOVE GROUND. IT STARTS WITH A DESCRIPTION OF THE HYDROLOGIC CYCLE. THE ATMOSPHERE, RIVERS, LAKES, SEAS AND OCEANS ARE THEN COVERED.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010396

PUBLICATION DATE: 83

TITLE: PRINCIPLES OF AQUATIC CHEMISTRY.

PERSONAL AUTHOR: MOREL, FRANCOIS M. M.

DESCRIPTOR: *AQUATIC CHEMISTRY; *CHEMISTRY; *CHEMICAL

REACTIONS; *EQUILIBRIUM; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *WATER; *WEATHERING

DESCRIPTIVE NOTE: 446P. PRICE: $49.95.

ABSTRACT: HERE IS A QUANTITATIVE TREATMENT OF THE CHEMICAL PRINCIPLES THAT GOVERN THE COMPOSITION OF NATURAL WATERS. INCLUDED ARE AN IN-DEPTH EXAMINATION OF THE APPLICATION OF CONSERVATION PRINCIPLES IN CHEMICAL SYSTEMS, THERMODYNAMIC AND KINETIC PRINCIPLES APPLICABLE TO AQUATIC SYSTEMS, NOVEL METHODOLOGY FOR EQUILIBRIUM CALCULATIONS AND AQUATIC CHEMISTRY ITSELF (INCLUDING ACID BASE, PRECIPITATION-DISSOLUTION, COORDINATION, REDOX AND SURFACE REACTIONS). TO ILLUSTRATE THE COUPLING OF REDOX AND ACID BASE REACTIONS ON NATURAL WATERS, A DETAILED NUMERICAL EXAMPLE OF THE MIXING OF HYDROTHERMAL VENT WATER AND DEEP SEAWATER IS GIVEN. AQUATIC PHOTOCHEMISTRY IS ALSO DISCUSSED. OTHER TOPICS INCLUDE WEATHERING AND REVERSE WEATHERING REACTIONS CONTROLLING ALKALINITY OF NATURAL WATERS. THE BOOK ALSO COORDINATES AQUATIC CHEMISTRY WITH LOW TEMPERATURE GEOTHERMAL CYCLES AND BIOLOGICAL PROCESSES.

AVAILABILITY: JOHN WILEY 8 SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010397

PUBLICATION DATE: 83

TITLE: PRACTICAL WASTE MANAGEMENT.

PERSONAL AUTHOR: HOLMES, J. R.

DESCRIPTOR: *INSTRUCTIONAL MATERIALS; *MANAGEMENT; *OPERATIONS (WASTES); *POSTSECONDARY EDUCATION; *WASTES; *WASTE DISPOSAL; *WASTE COLLECTION

DESCRIPTIVE NOTE: 500P. PRICE: $70.95.

ABSTRACT: THIS BOOK SUMMARIZES THE DEVELOPMENTS OF WASTE MANAGEMENT SERVICES OVER THE PAST DECADE, INCLUDING LEGISLATIVE CONTROLS, NEW CODES OF PRACTICE, ELEVATION OF STANDARDS AND TECHNOLOGICAL DEVELOPMENTS. SPECIFIC PAPERS DISCUSS SUCH TOPICS AS DECISION-MAKING, STORAGE AND COLLECTION, STREET CLEANING, LANDFILL AND TOXIC WASTE DISPOSAL. THE CARRIAGE AND TRANSFER OF BOTH SOLID AND LIQUID WASTES, COMMERCIAL WASTE REMOVAL, WASTE RECLAMATION TECHNIQUES AND THE SELECTION OF VEHICLES AND PRACTICE IN DEVELOPED AND DEVELOPING COUNTRIES ARE ALSO COVERED. THE BOOK IS BASED ON PRACTICAL EXPERIENCE IN BOTH EUROPE AND THE DEVELOPING WORLD.

AVAILABILITY: JOHN WILEY 8 SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010398

PUBLICATION DATE: 83

TITLE: INSTRUMENTATION FOR ENVIRONMENTAL MONITORING, 2ND ED, VOL. 1, RADIATION.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ENVIRONMENT; *ENVIRONMENTAL MONITORING; *INSTRUMENTATION; *MONITORING; *POLLUTANTS; *RADIATION; *RADIOACTIVE MATERIALS

DESCRIPTIVE NOTE: 1130P. PRICE: $150.00.

ABSTRACT: THIS EDITION IS A COMPREHENSIVE SURVEY OF TECHNIQUES AND INSTRUMENTATION FOR DETECTING AND CHARACTERIZING RADIOACTIVE POLLUTANTS. IT GIVES AN UNDERSTANDING OF RADIOACTIVE MATERIALS, THEIR MEASUREMENT AND BIOLOGICAL EFFECTS OF RADIATION EXPOSURE. MONITORING PROGRAMS ARE ALSO DISCUSSED. THE MOST HAZARDOUS TYPES OF RADIOACTIVITY ARE EMPHASIZED. DISCUSSIONS ENCOMPASS SOURCES SUCH AS NUCLEAR REACTORS AND SPENT FUEL REPROCESSING PLANTS. A DESCRIPTIVE LIST OF INSTRUMENTS COMMERCIALLY AVAILABLE TO MEASURE IONIZING RADIATION IS ALSO INCLUDED.

AVAILABILITY: JOHN WILEY 8 SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010399

PUBLICATION DATE: 83

TITLE: ANALYTICAL ASPECTS OF ENVIRONMENTAL CHEMISTRY.

PERSONAL AUTHOR: NATUSCH, DAVID F. S.; HOPKE, PHILLIP K.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; AIR ANALYSIS; *CHEMISTRY; *CHEMICAL SPECIATION; *ENVIRONMENTAL CHEMISTRY; *LABORATORY PROCEDURES; *RESEARCH; *STATISTICS; WATER ANALYSIS

DESCRIPTIVE NOTE: 267P. PRICE: $40.00.

ABSTRACT: THIS VOLUME PROVIDES AN UP-TO-DATE, STATE-OF-THE-ART REVIEW OF CHEMICAL SPECIATION METHODS, CAPILLARY COLUMN GAS CHROMATOGRAPHY AND SURFACE ANALYSIS METHODS. THERE IS AN INTRODUCTION TO SOPHISTICATED MULTIVARIATE STATISTICAL METHODS THAT ARE INCREASINGLY IMPORTANT IN ENVIRONMENTAL CHEMICAL STUDIES. FOUR MAJOR SUBDIVISIONS INCLUDE MATERIAL ON CHEMICAL SPECIATION, SPECIATION IN AIR ANALYSIS, SPECIATION IN WATER ANALYSIS, AND SELECTED SPECIFIC ELEMENTS. THE EMPHASIS IS ON PHYSIOCHEMICAL CHARACTERIZATION IN ENVIRONMENTAL PROBLEMS.

AVAILABILITY: JOHN WILEY 8 SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010400

PUBLICATION DATE: 82

TITLE: ENVIRONMENTAL ISOTOPES IN THE HYDROSPHERE.

PERSONAL AUTHOR: FERRONSKY, V. I.; POLYAKOV, V. A.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *HYDROSPHERE; *ISOTOPES

*GROUNDWATER; *RADIOACTIVE ISOTOPES; *SURFACE WATER; *WATER

DESCRIPTIVE NOTE: 466P. PRICE: $71.00.

ABSTRACT: THIS TRANSLATION OF THE RUSSIAN WORK PROVIDES A SYSTEMATIC STUDY OF THE STABLE AND RADIOACTIVE ISOTOPES FOR ALMOST ALL THE NATURAL WATERS OF THE HYDROSPHERE. EMPHASIS IS FOCUSED ON THE THREE LEADING GROUPS OF PROBLEMS IN THE STUDY OF NATURAL WATERS. THEIR GENESIS, THEIR DYNAMICS AND THEIR RESIDENT TIME IN NATURAL RESERVOIRS. DISCUSSION COVERS NATURAL REGULARITIES IN THE DISTRIBUTION OF STABLE ISOTOPES OF HYDROGEN AND OXYGEN, RADIOCARBON AND OTHER COSMOGENIC ISOTOPES, RADIOGENIC ISOTOPES OF THORIUM-URANIUM SERIES IN THE OCEAN, ATMOSPHERIC, SURFACE AND GROUND WATERS. NEW COSMOCHEMICAL AND RECENT THEORETICAL RESULTS ARE GIVEN.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010401

PUBLICATION DATE: 83

TITLE: EQUILIBRIA, NONEQUILIBRIA, & NATURAL WATERS, VOL. 1.

PERSONAL AUTHOR: PYTKOWICZ, RICARDO M.

DESCRIPTOR: *AQUATIC CHEMISTRY; *CHEMISTRY; *EQUILIBRIA; *INSTRUCTIONAL MATERIALS; *NATURAL WATERS; *NONEQUILIBRIA; *POSTSECONDARY EDUCATION; *WATER

DESCRIPTIVE NOTE: 351P. PRICE: $49.95; 2-VOLUME SET $84.95.

ABSTRACT: THIS BOOK COVERS AQUATIC CHEMISTRY FROM CHEMICAL, GEOLOGICAL, AND HYDROLOGICAL PRINCIPLES TO THE MOST COMPLEX SOLUTIONS AND SOLIDS FOUND IN OCEANS, RIVERS, LAKES AND LABORATORIES. THE BOOK PRESENTS CONCEPTS, SPECULATIONS, CRITICAL REVIEWS AND OVERVIEWS. AN EXTENSIVE BIBLIOGRAPHY AND NUMEROUS TABLES AND FIGURES ARE PROVIDED. WHEN POSSIBLE, EQUATIONS ARE DERIVED RATHER THAN SIMPLY PRESENTED.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010402

PUBLICATION DATE: 83

TITLE: EQUILIBRIA, NONEQUILIBRIA & NATURAL WATERS, VOL. 2.

PERSONAL AUTHOR: PYTKOWICZ, RICARDO M.

DESCRIPTOR: *AQUATIC CHEMISTRY; *CHEMISTRY; *EQUILIBRIA; *INSTRUCTIONAL MATERIALS; *NATURAL WATERS; *NONEQUILIBRIA; *POSTSECONDARY EDUCATION; *WATER

DESCRIPTIVE NOTE: 353P. PRICE: $49.95; 2-VOLUME SET $84.95.

ABSTRACT: THIS SECOND VOLUME OF THE TWO-VOLUME REFERENCE PRESENTS THEORETICAL MATERIAL FOR SERIOUS RESEARCH, AND INCLUDES FURTHER APPLICATIONS. IT COVERS ACIDS, HETEROGENEOUS KINETICS, NEW SOLID-SOLUTION EQUILIBRIUM WORK, COMPLEXES, AND REDOX REACTIONS. IN ADDITION, VOLUME 2 DISCUSSES, IN DETAIL, THE GEOCHEMISTRY OF TRACE METALS, GAS-WATER INTERACTIONS, AND OFFERS A SYNOPTIC VIEW OF THE MAIN CONCEPTS PRESENTED.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010403

PUBLICATION DATE: SEP 83

TITLE: AQUATIC TOXICOLOGY AND HAZARD ASSESSMENT: SIXTH SYMPOSIUM.

DESCRIPTOR: *AQUATIC ENVIRONMENTS; *BIOLOGICAL INDICATORS; *CONFERENCE PROCEEDINGS; *FIELD TESTING; *HAZARD ASSESSMENT; *MODELS; *POLLUTION CONTROL; *TOXICOLOGY

DESCRIPTIVE NOTE: 560P. PRICE: $47.20 MEMBERS; $59.00 LIST PRICE

ABSTRACT: THE PUBLICATION IS THE SIXTH VOLUME IN THE SERIES OF THE ASTM AQUATIC TOXICOLOGY SYMPOSIA. THE PUBLICATION CONTAINS 35 PAPERS AND PRESENTS AN OVERVIEW OF CURRENT RESEARCH ACTIVITIES AND THE STATE OF THE ART IN THEORETICAL AND APPLIED AQUATIC TOXICOLOGY AND HAZARD ASSESSMENT. NEW PROGRESS IN METHODOLOGY AND KNOWLEDGE ABOUT POLLUTANT EFFECTS AS WELL AS INFORMATION RELATING TO AGENCY POLICY IN MANAGING AND REGULATING WATER POLLUTION ARE DISCUSSED.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103. ATTN: SALES SERVICE DEPARTMENT

IRIS ACCESSION NUMBER: EW010404

PUBLICATION DATE: 83

TITLE: WASTES IN THE OCEAN, VOLUME 2: DREDGED MATERIAL DISPOSAL IN THE OCEAN.

PERSONAL AUTHOR: DUEDALL, IVER W.; AND OTHERS

DESCRIPTOR: *BIOLOGY; *CASE STUDIES; *CHEMISTRY; *DREDGED MATERIALS; *ENVIRONMENTAL IMPACT; *FEDERAL REGULATIONS; *OCEANS; *REGULATIONS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 320P. PRICE: $39.95.

ABSTRACT: THIS BOOK IS BASED ON THE SECOND INTERNATIONAL OCEAN DUMPING SYMPOSIUM HELD IN APRIL 1980. VOLUME 2 PROVIDES A COMPREHENSIVE OVERVIEW OF THE SCIENCE, TECHNOLOGY AND REGULATIONS INVOLVED IN THE DISPOSAL OF DREDGED MATERIAL IN THE OCEAN. IT PROVIDES THE LEGAL AND ENVIRONMENTAL ASPECTS OF DISPOSAL OF WASTES IN THE OCEAN, PRESENTING IMPLEMENTATION OF FEDERAL REGULATIONS, CASE STUDIES

INCLUDING CHEMICAL AND BIOLOGICAL ACTION AND ENVIRONMENTAL IMPACT, AND ANALYSES OF ALTERNATIVE DISPOSAL PROCEDURES.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010405

PUBLICATION DATE: 83

TITLE: WASTES IN THE OCEAN, VOLUME 3: RADIOACTIVE WASTES AND THE OCEAN.

PERSONAL AUTHOR: DUEDALL, IVER W.; AND OTHERS

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *ENVIRONMENTAL IMPACTS; *OCEANS; *PUBLIC HEALTH; *RADIOACTIVE WASTES; *SITE SELECTION; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 544P. PRICE: $85.00.

ABSTRACT: THIS BOOK IS BASED ON THE SECOND INTERNATIONAL OCEAN DUMPING SYMPOSIUM HELD IN APRIL 1980. THE THIRD VOLUME PRESENTS RESEARCH AND CASE STUDIES NECESSARY TO EVALUATE METHODS OF RADIOACTIVE WASTE DISPOSAL IN THE OCEAN. IT INTERRELATES OCEANOGRAPHIC PROPERTIES AND PROCESSES WITH WASTE DISPOSAL PRACTICES. COVERAGE OF BEHAVIOR AND FATES OF RADIOACTIVE WASTES IN THE MARINE ENVIRONMENT, EFFECTS ON MARINE BIOTA AND IMPLICATIONS FOR HUMAN HEALTH, AND STRATEGIES FOR DETERMINING OPTIMAL SITE SELECTION, ARE ALSO INCLUDED.
AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010406

PUBLICATION DATE: 83

TITLE: VIBRIOS IN THE ENVIRONMENT.

PERSONAL AUTHOR: COLWELL, RITA R.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *ECOLOGY; *ENVIRONMENT; *MICROBIOLOGY; *PUBLIC HEALTH; *RESEARCH; *VIBRIONACEAE; *WATER QUALITY

DESCRIPTIVE NOTE: 640P. PRICE: $45.00.

ABSTRACT: THIS BOOK CONSOLIDATES AND REPORTS RECENT GAINS IN RESEARCH BY BRINGING TOGETHER INFORMATION ON THE ECOLOGY AND DISTRIBUTION OF VIBRIO CHOLERAE AND RELATED VIBRIOS. THE RESEARCH SHOWS WIDESPREAD DISTRIBUTION OF PATHOGENIC AND NON-PATHOGENIC VIBRIOS IN THE NATURAL AQUATIC ENVIRONMENT. THIS BOOK ALSO ADDRESSES THE RISK THAT THESE VIBRIOS POSE TO PUBLIC HEALTH AND DESCRIBES A MUCH IMPROVED TAXONOMY OF THE GENERA AND SPECIES OF THE VIBRIONACEAE. IT ALSO REPORTS ON THE INCREASING NUMBER OF VIBRIOS IMPLICATED IN HUMAN DISEASE.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010408

PUBLICATION DATE: 83

TITLE: MATHEMATICAL MODELING OF WATER QUALITY: STREAMS, LAKES, AND RESERVOIRS.

PERSONAL AUTHOR: ORLOB, GERALD T.

DESCRIPTOR: *LAKES; *MATHEMATICAL MODELING; *MODELS; *RESERVOIRS; *STREAMS; *WATER QUALITY

DESCRIPTIVE NOTE: 518P. PRICE: $105.00.

ABSTRACT: THIS BOOK DEALS COMPREHENSIVELY WITH THE MATHEMATICAL MODELING OF WATER QUALITY IN STREAMS, LAKES AND RESERVOIRS. ABOUT ONE-THIRD OF THE BOOK DEALS WITH MODEL DEVELOPMENT PROCESSES (IDENTIFICATION, FORMULATION, PARAMETER ESTIMATION, PRINCIPLES OF MATHEMATICAL MODELING, CALIBRATION AND SENSITIVITY TESTING, ETC.) THE BALANCE OF THE BOOK CONCERNS SPECIFIC APPLICATIONS OF MODELS FOR SIMULATION OF WATER QUALITY IN NATURAL WATER BODIES. TOPICS INCLUDE MODELING OF TEMPERATURE, DISSOLVED OXYGEN AND PHYTOPLANKTON GROWTH, ONE-DIMENSIONAL MODELING OF CIRCULATION AND WATER QUALITY IN LARGE LAKES.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010409

PUBLICATION DATE: 83

TITLE: DRINKING WATER SUPPLIES: PROTECTION THROUGH WATERSHED MANAGEMENT.

PERSONAL AUTHOR: BURBY, R. J.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *MANAGEMENT; *POLLUTION CONTROL; *RAW WATER; *WATER QUALITY; *WATERSHEDS; *WATER SUPPLY

DESCRIPTIVE NOTE: 273P. PRICE: $29.95.

ABSTRACT: THE PRESSURE OF URBANIZATION ON WATERSHEDS MAKES THE PROTECTION OF RAW WATER SUPPLIES FROM CONTAMINATION IMPERATIVE. THIS VOLUME DESCRIBES A METHOD FOR DEVISING PROGRAMS TO PROTECT SURFACE WATER SOURCES. CHAPTERS ADDRESS THE POLLUTION PROBLEM, THE EVOLUTION OF SOURCE PROTECTION, THE STATE OF PRACTICE, PLANNING AND PROBLEM ANALYSIS, BASIC DIRECTIONS AND DIMENSIONS OF THE PROGRAM, INTERVENTION, PROGRAM DESIGN AND IMPLEMENTATION, AND PROGRAM MONITORING AND EVALUATION.

AVAILABILITY: BUTTERWORTH PUBLISHERS, 10 TOWER OFFICE PARK, WOBURN, MA 01801

IRIS ACCESSION NUMBER: EW010410

PUBLICATION DATE: 83

TITLE: STRATEGIES FOR THE CONTROL OF TRIHALOMETHANES.

DESCRIPTOR: AIR STRIPPING; COAGULATION; *CONFERENCE PROCEEDINGS; *DISINFECTION; *DRINKING WATER; GRANULAR ACTIVATED CARBON; MICROBIOLOGY; *OPERATIONS (WATER); *ORGANIC COMPOUNDS; OXIDANTS; *THM; *TRIHALOMETHANES; REGULATIONS; RESEARCH; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: $10.55 MEMBERS; $13.20 NONMEMBERS.

ABSTRACT: AUTHORED BY ACTIVE RESEARCHERS IN THE FIELD OF THM CONTROL, THIS PRACTICAL BOOK IS A COMPILATION OF SIX SEMINAR PAPERS PRESENTED AT THE 1983 ANNUAL CONFERENCE. PAPERS INCLUDE: (1) THM AND TOX FORMATION-ROUTES, RATES AND PRECURSORS; (2) APPLICABILITY OF COAGULANTS AND ALTERNATIVE OXIDANTS FOR CONTROLLING THM FORMATION; (3) MICROBIOLOGICAL CONSIDERATIONS IN COMPLYING WITH THE THM REGULATIONS; (4) DESIGN CONSIDERATIONS FOR GAC TREATMENT OF SYNTHETIC ORGANIC CHEMICALS AND TOC; (5) AIR STRIPPING OF TRIHALOMETHANES; AND (6) FIELD EXPERIENCES WITH CONTROLLING THMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, DATA PROCESSING DEPT., 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010411

PUBLICATION DATE: MAY 83

TITLE: PROCEEDINGS OF THE INTERNATIONAL UNESCO SYMPOSIUM - METHODS AND INSTRUMENTATION FOR THE INVESTIGATION OF GROUNDWATER SYSTEMS.

DESCRIPTOR: *COSTS; *CONFERENCE PROCEEDINGS; *GROUNDWATER; *INSTRUMENTATION; *HYDROLOGY; *MANAGEMENT; MONITORING; *SAMPLING; WATER QUALITY

DESCRIPTIVE NOTE: 704P. PRICE: $30.00.

ABSTRACT: THE SYNPOSIUM WAS CONVENED BY UNESCO AND ORGANISED BY UNESCO AND THE NETHERLANDS NATIONAL COMMITTEE FOR THE IHP IN CO-OPERATION WITH THE NETHERLANDS ORGANIZATION FOR APPLIED SCIENTIFIC RESEARCH TNO, CO-SPONSORED BY THE IAH AND IAHS. THE 60 PAPERS FROM 22 DIFFERENT COUNTRIES ARE GROUPED IN THE FOLLOWING TOPICS: (1) GENERAL INTRODUCTION (SIGNIFICANCE AND MAIN CHARACTERISTICS OF GROUNDWATER SYSTEMS, GOALS AND CRITERIA FOR THE DEVELOPMENT OF FIELDWORK PROGRAMMES); (2) CRITERIA FOR OPTIMAL SAMPLING STRATEGIES (INCLUDING DESIGN AND OPTIMIZATION OF WATER QUALITY MONITORING NETWORKS, COST-EFFECTIVE GROUNDWATER QUALITY SURVEILLANCE); (3) METHODS AND TECHNIQUES FOR THE DETERMINATION OF GEOHYDROLOGICAL PARAMETERS AND VARIABLES (INCLUDING PUMPING TEST SINGLE HOLE TECHNIQUE, RECENT REMOTE SENSING TECHNIQUES); AND (4) INSTRUMENTATION FOR THE ACQUISITION AND PROCESSING OF GEOHYDROLOGICAL DATA, INCLUDING ACCURACY, COST AND MANAGEMENT ASPECTS (INCLUDING SAMPLING TECHNIQUES OF GROUNDWATER FROM WATER WELLS AND PRE-PROCESSING AND STORAGE OF WATER LEVEL DATA RECORDED AT FIXED TIME INTERVALS). MOST OF THE PAPERS ARE WRITTEN IN ENGLISH (90%), OTHER ONES IN FRENCH. EACH PAPER HAS AN ABSTRACT IN ENGLISH AND FRENCH.

AVAILABILITY: BUREAU OF THE COMMITTEE FOR HYDROLOGICAL RESEARCH CHO, P.O. BOX 297, 2501 BD THE HAGUE, NETHERLANDS

IRIS ACCESSION NUMBER: EW010412

PUBLICATION DATE: 83

TITLE: WATER CONSERVATION IN RESIDENTIAL DEVELOPMENT: LAND-USE TECHNIQUES.

DESCRIPTOR: BUILDING CODES; *CONSERVATION; ECONOMICS; EDUCATION; INCENTIVES; *POLICIES; *POLICY IMPLEMENTATION; *WATER CONSERVATION; *WATER SUPPLY; *WATER USE

DESCRIPTIVE NOTE: PRICE: $17.75.

ABSTRACT: THIS PUBLICATION DESCRIBES HOW CITY PLANNERS, WORKING WITH LOCAL PUBLIC WORKS AND WATER DEPARTMENTS, HAVE IDENTIFIED BOTH OPPORTUNITIES FOR WATER CONSERVATION AND STRATEGIES FOR IMPLEMENTING THESE POLICIES. IT EXAMINES SOME OF THE MORE GENERALLY USED TECHNIQUES FOR REDUCING RESIDENTIAL WATER DEMAND, INCLUDING ECONOMIC INCENTIVES SUCH AS WATER PRICING TO ENCOURAGE CONSERVATION; PROVISIONS IN BUILDING CODES THAT MANDATE THE USE OF WATER SAVING DEVICES, AND EDUCATION AIMED AT MAKING THE PUBLIC MORE AWARE OF WAYS TO CONSERVE WATER. THE REPORT CITES CONSERVATION MEASURES IN BLOOMINGTON, MINN.; LOS ANGELES COUNTY, CALIF.; EL PASO COUNTY, COLO.; SANTA FE, NEW MEX., AND AURORA, COLO. THE METHODS INCLUDE WATER EFFICIENT LANDSCAPING, LOW-FLOW OR RESTRICTED-FLOW PLUMBING IN NEW CONSTRUCTION, GREATER HOUSING DENSITY, AND PUBLIC EDUCATION ON WATER CONSERVATION.

AVAILABILITY: APA PLANNERS BOOKSTORE, 1313 E. 60TH STREET, CHICAGO, IL 60637

IRIS ACCESSION NUMBER: EW010413

PUBLICATION DATE: 83

TITLE: INDUSTRIAL WATER TREATMENT CHEMICALS AND PROCESSES-DEVELOPMENTS SINCE 1978.

PERSONAL AUTHOR: COLLIE, M. J.

DESCRIPTOR: *COAGULATION; *CORROSION; *FLOCCULATION; *DISINFECTION; *INDUSTRIAL WASTES; *HEAVY METALS; *DEWATERING; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *PATENTS; *TECHNOLOGY; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 19P.

ABSTRACT: THIS BOOK BASED ON U.S. PATENT LITERATURE CONTAINS INNOVATIONS AND IMPROVEMENTS IN WASTEWATER TREATMENT TECHNOLOGY SINCE "INDUSTRIAL WASTEWATER CLEANUP," PUBLISHED IN 1979. PROCESSES ARE DESCRIBED FOR PREVENTION OF

SCALE DEPOSITION AND CORROSION, COAGULATION, FLOCCULATION, DISINFECTION, HEAVY METALS REMOVAL, AND DEWATERING OF SOLID RESIDUES.

AVAILABILITY: NOYES DATA CORP., MILL ROAD, PARK RIDGE, NJ 07656

IRIS ACCESSION NUMBER: EW010414

PUBLICATION DATE: 83

TITLE: ENVIRONMENTAL HEALTH ENGINEERING IN THE TROPICS: AN INTRODUCTORY TEXT.

PERSONAL AUTHOR: CAIRNCROSS, S.; FEACHEM, R. G.

DESCRIPTOR: *DISEASES; *ENVIRONMENTAL IMPACTS; *INFECTIOUS DISEASES; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *PUBLIC HEALTH; *SANITATION; *TROPICS; *WATER SUPPLIES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 183P. PRICE: $39.95.

ABSTRACT: MANY MAJOR INFECTIOUS DISEASES IN TROPICAL AND DEVELOPING COUNTRIES MAY BE CONTROLLED EFFECTIVELY BY ENVIRONMENTAL INTERVENTIONS. THIS BOOK DESCRIBES MOSQUITO-BORNE INFECTIONS SUCH AS THE DIARRHEAL DISEASES, COMMON GUT WORMS, AND MALARIA. THE RELATIONSHIPS BETWEEN THESE DISEASES AND ENVIRONMENTAL INTERVENTIONS-FOR EXAMPLE, DOMESTIC WATER SUPPLIES AND IMPROVED EXCRETA DISPOSAL-ARE DOCUMENTED.

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NY 10158

IRIS ACCESSION NUMBER: EW010415

PUBLICATION DATE: 83

TITLE: THE SCIENTIFIC MANAGEMENT OF HAZARDOUS WASTES.

PERSONAL AUTHOR: COPE, C. B.; AND OTHERS

DESCRIPTOR: *ALTERNATIVE TECHNOLOGIES; *COSTS; *CHEMICAL TREATMENT; *ENVIRONMENTAL IMPACTS; *HAZARDOUS WASTES; *INCINERATION; *MANAGEMENT; *LANDFILLS; *RESEARCH; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 480P. PRICE: $69.50.

ABSTRACT: THREE SCIENTISTS EXAMINE THE RESULTS OF RECENT RESEARCH AND DEVELOPMENT INTO THE ENVIRONMENTAL ASPECTS OF HAZARDOUS WASTE MANAGEMENT. LANDFILL SCIENCE, LEACHATE CHARACTERISTICS, POLLUTANT ATTENUATION, AND TOXICITY MEASUREMENT ARE REVIEWED. THE AUTHORS ALSO COMPARE ALTERNATIVE TECHNOLOGIES (SUCH AS CHEMICAL TREATMENT AND INCINERATION) AND DISCUSS RISK ASSESSMENT, COST IMPLICATIONS, AND PUBLIC ACCEPTANCE.

AVAILABILITY: CAMBRIDGE UNIVERSITY PRESS, 32 E. 57TH STREET, NEW YORK, NY 10022

IRIS ACCESSION NUMBER: EW010416

PUBLICATION DATE: 83

TITLE: ECOLOGICAL ASPECTS OF USED WATER TREATMENT - VOLUME 2: BIOLOGICAL ACTIVITIES AND TREATMENT PROCESSES.

PERSONAL AUTHOR: CURDS, C. R.; HAWKES, H. A.

DESCRIPTOR: *AEROBIC TREATMENT; *ANAEROBIC TREATMENT; *BIOLOGY; *ECOLOGY; *INDUSTRIAL WASTES; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 328P. PRICE: $55.00.

ABSTRACT: THE FIRST VOLUME, PUBLISHED IN 1975, DEALT WITH THE ROLE AND ECOLOGY OF THE FLORA AND FAUNA OF USED WATER TREATMENT PROCESSES. IN VOLUMES 2 AND 3 THE PRINCIPAL EMPHASIS IS ON DESCRIBING THE MAJOR AEROBIC AND ANAEROBIC PROCESSES USED IN TREATING SEWAGE AND INDUSTRIAL WASTE WATERS SO THAT THE BIOLOGIST CAN CLEARLY UNDERSTAND AND APPRECIATE THE ENGINEERING PROCESSES INVOLVED. THESE VOLUMES CONSTITUTE A COMPREHENSIVE STUDY OF THE SUBJECT FOR THE BIOLOGIST IN THE WATER INDUSTRY, ALTHOUGH ENGINEERS AND CHEMISTS INVOLVED WITH THESE PROCESSES WILL ALSO FIND THEM A USEFUL SOURCE OF SUPPLEMENTARY INFORMATION.

AVAILABILITY: ACADEMIC PRESS, INC., 111 FIFTH AVENUE, NEW YORK, NY 10003

IRIS ACCESSION NUMBER: EW010417

PUBLICATION DATE: 82

TITLE: WATER AND ENERGY: TECHNICAL AND POLICY ISSUES.

PERSONAL AUTHOR: XILPATRICK F.; MATCHETT, D.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DEVELOPMENT; *ENERGY; *ENVIRONMENTAL IMPACTS; *POLICIES; RESEARCH; WATER REUSE; WATER USE; WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 651P. PRICE: $52.00.

ABSTRACT: THIS VOLUME IS COMPOSED OF THE PROCEEDINGS OF REGIONAL MEETINGS HELD IN THE EASTERN AND WESTERN UNITED STATES. PAPERS WERE PRESENTED ON INSTITUTIONAL, POLITICAL, LEGAL, HYDROLOGICAL, AND ENVIRONMENTAL ISSUES CONCERNING DEVELOPMENT OF ENERGY AND ITS ASSOCIATED WATER RESOURCES. ALTHOUGH THERE ARE DIFFERENCES BETWEEN EAST AND WEST IN ISSUES RELATED TO WATER AND ENERGY, SESSIONS OF BOTH MEETINGS HAD COMMON THEMES, SUCH AS WATER CONSERVATION AND REUSE, COAL SLURRY PIPELINES, CITIZEN INVOLVEMENT, HYDROPOWER, AND RESEARCH AND DEVELOPMENT.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017

IRIS ACCESSION NUMBER: EW010418
PUBLICATION DATE: 82

TITLE: WATER FILTRATION. PROCEEDINGS OF A SYMPOSIUM, ANTWERP, BELGIUM, APR. 21-23, 1982.

PERSONAL AUTHOR: WEILER, R.; JANSSENS, J. G.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *FILTRATION; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *WATER QUALITY; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 430P.

ABSTRACT: THE PAPERS IN THIS PUBLICATION DEAL WITH FUNDAMENTALS OF FILTRATION, ASPECTS OF POTABLE WATER TREATMENT, ADVANCED WASTEWATER TREATMENT, DIRECT FILTRATION, OPTIMIZATION OF GRANULAR BED FILTRATION, AND SLUDGE TREATMENT. ALSO INCLUDED ARE SUMMARIES OF THE DISCUSSION SESSIONS CONDUCTED AFTER EACH GROUP OF RELATED PAPERS HAD BEEN PRESENTED.

AVAILABILITY: GENOOTSCHAP CHEMISCHE TECHNIEK-WERKGROEP MECHANISCHE SCHEIDINGSTECHNIEKEN, JAN VAN RIJSWIJCKLAAN 58, 2000-ANTWERPEN, BELGIUM.

IRIS ACCESSION NUMBER: EW010419

PUBLICATION DATE: 83

TITLE: ECOLOGICAL ASPECTS OF USED WATER TREATMENT - VOLUME 3: THE PROCESSES AND THEIR ECOLOGY.

PERSONAL AUTHOR: CURDS, C. R.; HAWKES, H. A.

DESCRIPTOR: *AEROBIC PROCESSES; *ANAEROBIC PROCESSES; *ECOLOGY; *INDUSTRIAL WASTES; INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); POSTSECONDARY EDUCATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 332P. PRICE: $60.00.

ABSTRACT: THE FIRST VOLUME, PUBLISHED IN 1975, DEALT WITH THE ROLE AND ECOLOGY OF THE FLORA AND FAUNA OF USED WATER TREATMENT PROCESSES. IN VOLUMES 2 AND 3 THE PRINCIPAL EMPHASIS IS ON DESCRIBING THE MAJOR AEROBIC AND ANAEROBIC PROCESSES USED IN TREATING SEWAGE AND INDUSTRIAL WASTE WATERS SO THAT THE BIOLOGIST CAN CLEARLY UNDERSTAND AND APPRECIATE THE ENGINEERING PROCESSES INVOLVED. THESE VOLUMES CONSTITUTE A COMPREHENSIVE STUDY OF THE SUBJECT FOR THE BIOLOGIST IN THE WATER INDUSTRY, ALTHOUGH ENGINEERS AND CHEMISTS INVOLVED WITH THESE PROCESSES WILL ALSO FIND THEM A USEFUL SOURCE OF SUPPLEMENTARY INFORMATION.

AVAILABILITY: ACADEMIC PRESS, INC., 111 FIFTH AVENUE, NEW YORK, NY 10003

IRIS ACCESSION NUMBER: EW010420
PUBLICATION DATE: DEC 83

TITLE: BIO-INDICATORS AND CHEMICAL POLLUTION OF SURFACE WATERS.

PERSONAL AUTHOR: SLOOF, W.; DE ZWART, D.

DESCRIPTOR: *BIOINDICATORS; *CHEMICAL POLLUTION; *ENVIRONMENT; *EVALUATION; *OBSERVATION; *WATER QUALITY

DESCRIPTIVE NOTE: 237-245P.

ABSTRACT: THIS ARTICLE PRESENTS TWO DIFFERENT APPROACHES FOR DETERMINING THE WATER QUALITY IN RELATION TO TOXIC STRESS. THE FIRST APPROACH IS BASED ON DIRECT OBSERVATIONS OF THE BIOTA IN THE ENVIRONMENT TO BE JUDGED. THE SECOND APPROACH IS BASED ON INDIRECT OBSERVATIONS, DETERMINING THE WATER QUALITY BY EXAMINATION OF ORGANISMS EXPERIMENTALLY EXPOSED TO THE WATER UNDER CONTROLLED CONDITONS.

AVAILABILITY: ENVIRONMENTAL MONITORING & ASSESSMENT; V3 N3/4

IRIS ACCESSION NUMBER: EW010421

PUBLICATION DATE: JAN 84

TITLE: PRIVATIZING WASTEWATER TREATMENT.

PERSONAL AUTHOR: RAWLS, BENJAMIN M.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *CONTRACT SERVICES; *FINANCING; *FACILITIES; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PRIVATIZATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 82-84P.

ABSTRACT: THIS ARTICLE DISCUSSES PRIVATIZING WASTEWATER TREATMENT. PRIVATIZATION CAN BE THOUGHT OF AS A THREE-PHASE PROJECT: (1) PRIVATE FINANCING; (2) TURNKEY CONSTRUCTION; AND (3) FULL SERVICE OPERATION AND MAINTENANCE. EXAMPLES OF SOME COMMUNITIES THAT HAVE USED THIS APPROACH ARE IDENTIFIED.

AVAILABILITY: AMERICAN CITY & COUNTY; V99 N1

IRIS ACCESSION NUMBER: EW010422

PUBLICATION DATE: JAN 84

TITLE: CONSULTRAINING: MERGING MANAGEMENT EDUCATION WITH ORGANIZATION DEVELOPMENT.

PERSONAL AUTHOR: HORNSTEIN, HARVEY A.; MACKENZIE, FRED T.

DESCRIPTOR: *ATTITUDES; *BEHAVIOR; *MANAGEMENT EDUCATION; *MANAGEMENT; *ORGANIZATION DEVELOPMENT; *PERFORMANCE

EVALUATION; *TRAINING
DESCRIPTIVE NOTE: 52-56P.

ABSTRACT: SCHOLARS AND PRACTITIONERS HAVE OFTEN PITTED MANAGEMENT EDUCATION AND ORGANIZATION DEVELOPMENT AGAINST ONE ANOTHER. RECENTLY THE CLAIMS MADE BY PROPONENTS OF ONE OR THE OTHER HAS INTENSIFIED, AND THE PERCEIVED SPLIT BETWEEN THEM SEEMS FINAL. THIS ARTICLE CHALLENGES THE EITHER/OR WAY OF LOOKING AT THESE TWO INTERVENTIONS AND OFFERS A PRACTICAL, TESTED ALTERNATIVE THAT INTEGRATES THEM, IMPROVING THE ORGANIZATIONAL BENEFITS OF EACH.

AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V38 N1

IRIS ACCESSION NUMBER: EW010423

PUBLICATION DATE: JAN 84

TITLE: HOW PEOPLE LEARN: ASSUMPTIONS FOR DESIGN.

PERSONAL AUTHOR: SCHERER, JOHN J.

DESCRIPTOR: *LEARNING; *INSTRUCTION; *INSTRUCTIONAL DESIGN; *PSYCHOLOGY; *TRAINING

DESCRIPTIVE NOTE: 64-66P.

ABSTRACT: THIS ARTICLE PRESENTS ASSUMPTIONS ABOUT HOW PEOPLE LEARN. THE AUTHOR USES THESE IN DESIGNING LEARNING ACTIVITIES.
AVAILABILITY: TRAINING 8 DEVELOPMENT JOURNAL; V38 N1

IRIS ACCESSION NUMBER: EW010424

PUBLICATION DATE: JAN 84

TITLE: OZONATION REDUCES MANGANESE CONCENTRATION.

PERSONAL AUTHOR: KIRK, J. THOMAS

DESCRIPTOR: *COSTS; *DRINKING WATER; *MANGANESE OXIDATION; *OPERATIONS (WATER); *OZONE; *WATER QUALITY; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: IN NEW ULM, MINNESOTA, THE OZONATION PROCESS WAS SELECTED AS THE MOST COST-EFFECTIVE METHOD OF MANGANESE OXIDATION FOR POTABLE WATER.

AVAILABILITY: PUBLIC WORKS; V115 N1

IRIS ACCESSION NUMBER: EW010425
PUBLICATION DATE: JAN 84

TITLE: SLUDGE TREATMENT BY OXYOZOSYNTHESIS STOPS OCEAN DUMPING.

PERSONAL AUTHOR: PETERSON, STANLEY A.; MOZELL, ERIC

DESCRIPTOR: *COSTS; *CROAL; *OCEAN DUMPING; *OPERATIONS (WASTEWATER); *OXYOZOSYNTHESIS; *SLUDGE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 42-43P.

ABSTRACT: A BATCH TREATMENT PROCESS IN A PRESSURIZED ATMOSPHERE OF OXYGEN AND OZONE STERILIZES SLUDGE AND RELEASES BOUND WATER.

AVAILABILITY: PUBLIC WORKS; V115 N1

IRIS ACCESSION NUMBER: EW010426

PUBLICATION DATE: JAN 84

TITLE: DESIGN OF POLISHING PONDS.

PERSONAL AUTHOR: RICH, LINVIL G.

DESCRIPTOR: *DESIGN; *EFFLUENTS; *OPERATIONS (WASTEWATER); *POLISHING PONDS; *SUSPENDED SOLIDS; *WASTEWATER TREATMENT
DESCRIPTIVE NOTE: 52-53P.

ABSTRACT: PRESENTED IS A DISCUSSION OF AND DESIGN OF POLISHING PONDS TO REMOVE EXCESS SUSPENDED SOLIDS FROM TREATMENT PLANT EFFLUENT.

AVAILABILITY: PUBLIC WORKS; V115 N1

IRIS ACCESSION NUMBER: EW010427

PUBLICATION DATE: JAN 84

TITLE: FLOATABLE BALL JOINT PIPE SIMPLIFIES RIVER CROSSING.

DESCRIPTOR: *BALL JOINT PIPES; *INSTALLATION; *PIPES; *RIVER CROSSINGS; *RIVERS; *WATER PIPES

DESCRIPTIVE NOTE: 54-57P.

ABSTRACT: THE WATERTIGHTNESS OF ROTATING BALL JOINTS ALLOWS CONCRETE PRESSURE PIPES TO BE FLOATED INTO POSITION.

AVAILABILITY: PUBLIC WORKS; V115 N1

IRIS ACCESSION NUMBER: EW010428
PUBLICATION DATE: JAN 84

TITLE: ENERGY AUDIT OF A WASTEWATER TREATMENT PLANT.

PERSONAL AUTHOR: STEIGER, BERNARD L.; AND OTHERS

DESCRIPTOR: *ECONOMICS; *ENERGY AUDITS; *ENERGY CONSERVATION; *FACILITIES; *OPERATIONS (WASTEWATER); *OHIO; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 62-64P.

ABSTRACT: ENERGY CONSERVATION OPPORTUNITIES FOR WASTEWATER TREATMENT PLANTS WERE IDENTIFIED AND EVALUATED TO DETERMINE EASE OF IMPLEMENTATION, SAVINGS POTENTIAL, AND PAYOUT TIME.

AVAILABILITY: PUBLIC WORKS; V115 N1

IRIS ACCESSION NUMBER: EW010429

PUBLICATION DATE: JAN 84

TITLE: FINANCIAL PERFORMANCE: OPPORTUNITIES FOR UTILITY MANAGEMENT.

PERSONAL AUTHOR: TAYLOR, THOMAS E.

DESCRIPTOR: *BUDGETING; *COSTS; *FEES; *FINANCES; *MANAGEMENT; *PLANNING; *SERVICE RATES; *RATES; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 8,50P.

ABSTRACT: DISCUSSED IS THE FINANCIAL ASPECT OF UTILITY MANAGEMENT. EXAMPLES OF FEES, RETAINED EARNINGS, AND FINANCIAL GOALS ARE PRESENTED.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010430

PUBLICATION DATE: JAN 84

TITLE: MBO KEEPS CINCINNATI WATER WORKS ON COURSE.

PERSONAL AUTHOR: HERSCH, PAUL

DESCRIPTOR: *MANAGEMENT; *OBJECTIVES; *PLANNING; *WATER TREATMENT; *WATER UTILITIES

DESCRIPTIVE NOTE: 18,50P.

ABSTRACT: THIS ARTICLE DESCRIBES THE CONCEPT OF MANAGEMENT BY OBJECTIVES AS USED BY THE CINCINNATI (OHIO) WATER WORKS.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010431
PUBLICATION DATE: JAN 84

TITLE: TRAINING TREATMENT PLANT OPERATIONS VIA MICROCOMPUTER.

DESCRIPTOR: *MICROCOMPUTERS; *OPERATOR TRAINING; *OPERATIONS (WASTEWATER); *SIMULATIONS; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20-22P.

ABSTRACT: DESCRIBED IS A TRAINING PROGRAM FOR WASTEWATER TREATMENT OPERATORS BEING DEVELOPED BY CAMP DRESSER AND MCKEE. THE PROGRAM USES THE MICROCOMPUTER TO SIMULATE TREATMENT PROCESSES.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010432

PUBLICATION DATE: JAN 84

TITLE: DEWATERING SYSTEMS MAKE LIFE EASIER AT TWO TREATMENT PLANTS.

PERSONAL AUTHOR: LANGWORTHY, VIRGIL W.

DESCRIPTOR: *CANADA; *DEWATERING SYSTEMS; *COSTS; *EQUIPMENT; *FACILITIES; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24-25P.

ABSTRACT: DESCRIBED ARE DEWATERING SYSTEMS FOR TWO CANADIAN WASTEWATER TREATMENT PLANTS. THE SYSTEMS HAVE BEEN EFFECTIVE AND REDUCED COSTS.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010433

PUBLICATION DATE: JAN 84

TITLE: WASTEWATER LAB OF THE FUTURE.

PERSONAL AUTHOR: GREEN, DANIEL S.; MEISLER, JOSEPH

DESCRIPTOR: *COSTS; *DESIGN; *EQUIPMENT; *FACILITIES; *LABORATORIES; *LABORATORY FACILITIES; *LABORATORY EQUIPMENT; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 26-31P.

ABSTRACT: THE ANALYTICAL REQUIREMENTS OF TODAY AND TOMORROW MEAN THAT WATER AND WASTEWATER LABORATORIES MUST EQUIP THEMSELVES WITH MORE THAN TEST TUBES AND FLASKS. DESCRIBED IS A LABORATORY FOR A LARGE PLANT IN NEW JERSEY.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010434

PUBLICATION DATE: JAN 84

TITLE: UNDERSTANDING AND APPLYING THE PROGRAMMABLE CONTROLLER.

PERSONAL AUTHOR: ARNONE, ANTHONY M.

DESCRIPTOR: *AUTOMATIC CONTROLS; *DATA ANALYSIS; *DATA COLLECTION; *MANAGEMENT; *OPERATIONS (WATER); *PROGRAMMABLE CONTROLLERS; *WATER TREATMENT

DESCRIPTIVE NOTE: 32-36P.

ABSTRACT: THE WATER INDUSTRY WASN'T THE FIRST TO USE THE PROGRAMMABLE CONTROLLER (PC), BUT IT IS BEGINNING TO CATCH ON TO ITS VERSATILITY. DESCRIBED ARE USES FOR PC'S AND WAYS OF ARRANGING SYSTEMS.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010435

PUBLICATION DATE: JAN 84

TITLE: COMING DOWN ON DOWNTIME.
PERSONAL AUTHOR: REED, CLIFFORD

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SEMINARS; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 40-41P.

ABSTRACT: A SPECIAL TRAINING SEMINAR ACQUAINTS WASTEWATER TREATMENT PERSONNEL WITH THE THEORETICAL AND PRACTICAL ASPECTS OF SEALS AND PACKING, THEIR OPERATIONAL ROLES, AND THOSE ELEMENTS THAT AFFECT THEM. SOME OF THE ACTIVITIES ARE DESCRIBED.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010436

PUBLICATION DATE: JAN 84

TITLE: AFTER 43 YEARS, THESE PUMPS ARE STILL GOOD.

PERSONAL AUTHOR: HERRICK, S. A.; GARRETT, B. G.

DESCRIPTOR: *COSTS; *EQUIPMENT; *MAINTENANCE; *PREVENTIVE MAINTENANCE; *OPERATIONS (WASTEWATER); *REPAIR; *PUMPS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 42-43P.

ABSTRACT: SOMETIMES IT PAYS TO REFURBISH PUMPING EQUIPMENT RATHER THAN REPLACE - AS THE BUFFALO SEWER AUTHORITY FOUND DURING ITS WASTEWATER TREATMENT FACILITIES' UPDATE. THE REHABILITATION PROJECT IS DESCRIBED.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V131 N1

IRIS ACCESSION NUMBER: EW010437

PUBLICATION DATE: DEC 83

TITLE: REFLECTIONS, PERCEPTIONS, AND PROJECTIONS.

PERSONAL AUTHOR: WOLMAN, ABEL

DESCRIPTOR: *CHEMICALS; *DISEASES; *DRINKING WATER; *INFECTIOUS DISEASES; *INORGANIC COMPOUNDS; *INDUSTRIAL WASTES; *ORGANIC COMPOUNDS; *POLLUTION CONTROL; *PUBLIC HEALTH; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 1412-1416P.

ABSTRACT: DESCRIBED ARE SOME PUBLIC HEALTH PROBLEMS RELATED TO WATER AND WASTEWATER. INCLUDED ARE INFECTIOUS DISEASES, INORGANIC CHEMICALS, AND ORGANIC CHEMICALS. SOME POSSIBLE ACTIONS ARE IDENTIFIED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010438

PUBLICATION DATE: DEC 83

TITLE: HOW TO CONSTRUCT REFERENCE DISTRIBUTIONS TO EVALUATE TREATMENT PLANT EFFLUENT QUALITY.

PERSONAL AUTHOR: BERTHOUEX, P. M.; HUNTER, W. G.

DESCRIPTOR: *DATA ANALYSIS; *EFFLUENTS; *EFFLUENT QUALITY; *EVALUATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *STATISTICS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1417-1424P.

ABSTRACT: DESPITE THEIR SIMPLICITY, REFERENCE DISTRIBUTIONS ARE A STATISTICALLY VALID AND POWERFUL OPERATIONAL TOOL. THIS PAPER DISCUSSES THE REFERENCE DISTRIBUTION THAT DESCRIBES HIS PLANT'S PERFORMANCE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010439

PUBLICATION DATE: DEC 83

TITLE: THE INFLUENCE OF PROCESS VARIABLES ON SECONDARY

CLARIFICATION.

PERSONAL AUTHOR: CHAPMAN, DAVID T.

DESCRIPTOR: *CLARIFICATION; *COSTS; *DESIGN; *EFFICIENCY; *EFFLUENTS; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SECONDARY CLARIFICATION; *SETTLERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1425-1434P.

ABSTRACT: BECAUSE THERE IS NO CONSENSUS IN THE LITERATURE CONCERNING THE RELATIVE IMPORTANCE OF DESIGN AND OPERATING VARIABLES ON SETTLER EFFICIENCY, A RESEARCH PROGRAM WAS DESIGNED. SUSPENDED SOLIDS, FEED RATE, AND SIDEWATER DEPTH ACCOUNTED FOR THREE-FOURTHS OF THE EFFLUENT VARIABILITY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010440

PUBLICATION DATE: DEC 83

TITLE: PILOT PLANT DETERMINATION OF OXYGEN TRANSFER IN FINE BUBBLE AERATION.

PERSONAL AUTHOR: DOYLE, MICHAEL L.; AND OTHERS

DESCRIPTOR: *AERATION SYSTEMS; *BIOLOGICAL WASTEWATER TREATMENT; *DESIGN; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PILOT TESTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1435-1440P.

ABSTRACT: PILOT SCALE TESTS CAN READILY DETERMINE VARIATIONS IN OXYGEN TRANSFER COEFFICIENTS THAT CAN SIGNIFICANTLY AFFECT DESIGN PARAMETERS FOR AERATION SYSTEMS FOR BIOLOGICAL WASTEWATER TREATMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010441

PUBLICATION DATE: DEC 83

TITLE: INHIBITION OF ANAEROBIC DIGESTION BY ORGANIC PRIORITY POLLUTANTS.

PERSONAL AUTHOR: JOHNSON, LYLE D.; YOUNG, JAMES C.

DESCRIPTOR: *ADSORPTION; *ANAEROBIC DIGESTION; *INHIBITION; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *RESEARCH; *TOXIC CHEMICALS; *WASTEWATER

DESCRIPTIVE NOTE: 1441-1449P.

ABSTRACT: LABORATORY TESTS WERE INITIATED TO STUDY THE INHIBITION OF ANAEROBIC CULTURES BY TOXIC CHEMICALS. ADSORPTION PLAYS AN IMPORTANT ROLE IN REDUCING THE CONCENTRATION OF SOLUBLE ORGANIC COMPOUNDS, REDUCES TOXICITY, AND ENHANCES RECOVERY FOR SOME TOXIC COMPOUNDS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010442

PUBLICATION DATE: DEC 83

TITLE: HEAVY METAL REMOVAL IN A PACKED-BED, ANAEROBIC UPFLOW (ANFLOW) BIOREACTOR.

PERSONAL AUTHOR: RIVERA, A. L.

DESCRIPTOR: *ANAEROBIC UPFLOW; *ANFLOW; BACTERIA; *BIOREACTORS; *HEAVY METALS; *METALS; *MODELS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1450-1456P.

ABSTRACT: A STUDY WAS CONDUCTED TO STUDY HEAVY METAL REMOVAL IN ANFLOW BIOREACTORS. REMOVAL OF HEAVY METALS CAN BE DESCRIBED BY MODELS SIMILAR TO THOSE USED FOR ION EXCHANGE COLUMNS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010443

PUBLICATION DATE: DEC 83

TITLE: EFFECTS OF PERIODICALLY REVERSING THE DIRECTION OF FLOW THROUGH AN RBC.

PERSONAL AUTHOR: BANDY, JOHN T.; SCHOLZE, RICHARD J.

DESCRIPTOR: *COD CONCENTRATION; *EFFLUENTS; *NITRIFICATION; *OXYGEN DEMAND; *PILOT TESTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *ROTATING BIOLOGICAL CONTACTORS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1457-1460P.

ABSTRACT: THE EFFECT OF PERIODICALLY REVERSING THE DIRECTION OF FLOW THROUGH A ROTATING BIOLOGICAL CONTACTOR WAS REVIEWED. THE TECHNIQUE CAN REDUCE EFFLUENT OXYGEN DEMAND AND ITS VARIABILITY, BUT MAY ALSO INTERFERE WITH NITRIFICATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010444
PUBLICATION DATE: DEC 83

TITLE: NITRIFICATION IN BOD5 TEST INCREASES POTW NONCOMPLIANCE.

PERSONAL AUTHOR: HALL, JOHN C.; FOXEN, ROBERT J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CBOD; *BOD; *COMPLIANCE; *EVALUATION; *LABORATORY PROCEDURES; *NITRIFICATION; *OPERATIONS (WASTEWATER); *SECONDARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1461-1469P.

ABSTRACT: REVISIONS TO THE BIOCHEMICAL OXYGEN DEMAND TEST PROCEDURES TO INHIBIT NITRIFICATION WOULD PROVIDE A MORE ACCURATE MEASURE OF PLANT EFFICIENCY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010445

PUBLICATION DATE: DEC 83

TITLE: CHEMICAL COMPOSITION AND POSSIBLE MUTAGENICITY OF MUNICIPAL SLUDGES.

PERSONAL AUTHOR: CLEVENGER, TOM E.; AND OTHERS

DESCRIPTOR: *AGRICULTURE; *LAND APPLICATION; *MUTAGENIC SUBSTANCES; *ORGANIC COMPOUNDS; *RESEARCH REPORTS; *SLUDGE; *TOXIC SUBSTANCES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 1470-1475P.

ABSTRACT: SLUDGES FROM 74 MISSOURI WASTEWATER TREATMENT PLANTS WERE CHECKED FOR POSSIBLE MUTAGENIC AND OTHER SUBSTANCES. NONE OF THE 74 SLUDGES TESTED HAD SIGNIFICANT AMOUNTS OF TOXIC ORGANICS THAT WERE CHECKED, BUT A FEW WERE HIGH IN TOXIC HEAVY METALS. NONE OF THE FIVE FACILITIES CHECKED WERE FOUND TO HAVE MUTAGENIC POTENTIAL. WITH A FEW POSSIBLE EXCEPTIONS, THE SLUDGES FROM THE 74 FACILITIES SHOULD BE ACCEPTABLE FOR AGRICULTURAL APPLICATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010446

PUBLICATION DATE: DEC 83

TITLE: DIURNAL WATER QUALITY MODELING--A CASE STUDY.

PERSONAL AUTHOR: DEB, ARUN K.; BOWERS, DOROTHY

DESCRIPTOR: *CASE STUDIES; *DISSOLVED OXYGEN; *MODELS; *OXYGEN; *PHOSYNTHESIS; *RESEARCH; *RIVERS; *WATER QUALITY

DESCRIPTIVE NOTE: 1476-1488P.
ABSTRACT: ACCURATE DISSOLVED OXYGEN MODELING REQUIRES PROPER EVALUATION OF PHOTOSYNTHESIS AND RESPIRATION RATES OF AQUATIC PLANT COMMUNITIES. THIS IS A CASE STUDY OF THE SOUTH FORK OF THE SHENANDOAH RIVER IN VIRGINIA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010447

PUBLICATION DATE: DEC 83

TITLE: VARIABLE EFFLUENT NITRIFICATION REQUIREMENTS BASED ON INSTREAM WATER QUALITY.

PERSONAL AUTHOR: KUCHENRITHER, RICHARD D.; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *COLORADO; *COSTS; *DISCHARGE PERMITS; *EFFLUENTS; *EVALUATION; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PLANNING; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 1489-1496P.

ABSTRACT: A DISCHARGE PERMIT THAT ALLOWS ALTERNATE DISCHARGE POINTS RESULTS IN CONSIDERABLE SAVINGS IN NITRIFICATION COSTS. REPORTED ARE WATER QUALITY MANAGEMENT ACTIVITIES OF FORT COLLINS, COLORADO THAT RESULTED IN A PROPOSED MANAGEMENT PROGRAM AND IMPLEMENTATION PROCEDURES THAT WOULD MAINTAIN WATER QUALITY AND SAVE OVER $100,000 PER YEAR.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V55 N12

IRIS ACCESSION NUMBER: EW010448

PUBLICATION DATE: JAN 84

TITLE: EVALUATING THE SAFETY AND SEISMIC STABILITY OF EMBANKMENT RESERVOIRS.

PERSONAL AUTHOR: RYDEN, DEAN E.

DESCRIPTOR: DRINKING WATER; *EARTHQUAKES; *EVALUATION; *FACILITIES; *RESERVOIRS; *WATER STORAGE

DESCRIPTIVE NOTE: 35-39P.

ABSTRACT: OPEN STORAGE RESERVOIRS FORMED BY EARTHEN EMBANKMENTS ARE USED EXTENSIVELY IN SEATTLE, WASH. A GEOTECHNICAL EVALUATION OF 12 SUCH RESERVOIRS WAS CONDUCTED TO DETERMINE THE SAFETY AND SEISMIC STABILITY OF THE FACILITIES IN THE EVENT OF EARTHQUAKES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010449

PUBLICATION DATE: JAN 84

TITLE: KEEPING OLD RESERVOIRS ACTIVE.

PERSONAL AUTHOR: WHITFIELD, FRED

DESCRIPTOR: *FACILITIES; *MAINTENANCE; *OPEN RESERVOIRS; *OPERATIONS (WATER); *RESERVOIRS; *WATER DISTRIBUTION; *WATER STORAGE

DESCRIPTIVE NOTE: 40-43P.

ABSTRACT: RIGOROUS MAINTENANCE OF OPEN RESERVOIRS IN PORTLAND, OREGON MAINTAINS 90-YEAR OLD FACILITIES. CLEANING IS DONE TWICE A YEAR AND REPAIRS ARE MADE ON A REGULAR BASIS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION; V76 N1

IRIS ACCESSION NUMBER: EW010450

PUBLICATION DATE: JAN 84

TITLE: CATHODIC PROTECTION OF WATER STORAGE TANKS.

PERSONAL AUTHOR: BUSHMAN, JAMES B.; KROON, DAVID H.

DESCRIPTOR: *AUTOMATIC CONTROL SYSTEMS; *CATHODIC PROTECTION; *CORROSION CONTROL; *DRINKING WATER; *FACILITIES; *TANKS; *WATER DISTRIBUTION; *WATER STORAGE; *WATER TANKS

DESCRIPTIVE NOTE: 44-51P.

ABSTRACT: NEW CATHODIC DEVICES FOR WATER STORAGE TANKS INHIBIT CORROSION AND PROVIDE SAVINGS. SOME TYPES OF NEW ANODE MATERIALS HAVE A DESIGN LIFE OF 10 TO 20 YEARS. AUTOMATIC ELECTRIC CURRENT CONTROL SYSTEMS ARE ALSO AVAILABLE TO COMPENSATE FOR FLUCTUATING CONDITIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010451

PUBLICATION DATE: JAN 84

TITLE: COMPUTER MODELING SOLVES A WATER STORAGE PROBLEM.

PERSONAL AUTHOR: HIRREL, TIMOTHY D.

DESCRIPTOR: *COMPUTER MODELING; *FACILITIES; *MAINTENANCE; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *RESERVOIRS; *TANKS; *WATER STORAGE; *WATER TANKS

DESCRIPTIVE NOTE: 53-55P.

ABSTRACT: COMPUTER MODELING TECHNIQUES SOLVED THE MYSTERY OF THE FAILURE OF A NEW WATER STORAGE TANK TO FILL TO CAPACITY. THE ANALYTIC METHODS AND THE RELEVANT DATA THAT WERE USED TO SOLVE THE PROBLEM ARE DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010452

PUBLICATION DATE: JAN 84

TITLE: STEEL WATER STORAGE TANKS.

PERSONAL AUTHOR: BUZEK, JOHN R.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *DRINKING WATER; *FACILITIES; *OPERATIONS (WATER); *RESERVOIRS; *TANKS; *WATER DISTRIBUTION; *WATER STORAGE; *WATER TANKS

DESCRIPTIVE NOTE: 56-59P.

ABSTRACT: CRITERIA ARE DISCUSSED FOR SELECTING, LOCATING, AND ERECTING WATER STORAGE TANKS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010453

PUBLICATION DATE: JAN 84

TITLE: SELECTING AND APPLYING PROTECTIVE COATINGS.

PERSONAL AUTHOR: TATOR, KENNETH B.

DESCRIPTOR: *COATINGS; *FACILITIES; *MAINTENANCE; *PAINTING; *RESERVOIRS; *STEEL TANKS; *TANKS; *WATER DISTRIBUTION; *WATER STORAGE; *WATER TANKS

DESCRIPTIVE NOTE: 60-63P.

ABSTRACT: TIPS ARE GIVEN ON HOW TO ENSURE QUALITY COATING OF STEEL WATER STORAGE TANKS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010454

PUBLICATION DATE: JAN 84

TITLE: DETERMINATION OF CHLORINE DIOXIDE, CHLORINE, CHLORITE, AND CHLORATE IN WATER.

PERSONAL AUTHOR: AIETA, E. MARCO; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINE; *CHLORINE DIOXIDE; *DISINFECTION; *LABORATORY PROCEDURES; *OPERATIONS

(WATER); *WATER TREATMENT
DESCRIPTIVE NOTE: 64-70P.

ABSTRACT: AMPEROMETRIC OR POTENTIOMETRIC METHODS CAN BE USED TO MEASURE CHLORINE DIOXIDE-GENERATOR PRODUCT STREAMS AND RESIDUALS IN TREATED WATER.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010455

PUBLICATION DATE: JAN 84

TITLE: CHLORINATION-FILTRATION FOR IRON AND MANGANESE REMOVAL.

PERSONAL AUTHOR: WONG, JOSEPH M.

DESCRIPTOR: *CHLORINATION; *COSTS; *FILTRATION; *IRON; *MANGANESE; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 76-79P.

ABSTRACT: THE USE OF CHLORINATION-FILTRATION CAN LEAD TO SAVINGS IN CAPITAL AND OPERATING COSTS. THIS ARTICLE DESCRIBES THREE PROCESSES FOR REMOVAL OF IRON AND MANGANESE AND PRESENTS RESULTS FROM A PILOT STUDY OF CHLORINATION-FILTRATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010456

PUBLICATION DATE: JAN 84

TITLE: OVERLAND FLOW FOR IRON REMOVAL FROM POTABLE WATER.

PERSONAL AUTHOR: ZIRSCHKY, JOHN; CARLSON, LIISA

DESCRIPTOR: *FACILITIES; *DRINKING WATER; *FINLAND; *IRON; *MANGANESE; *OVERLAND FLOW; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 80-83P.

ABSTRACT: OVERLAND FLOW REMOVES IRON THROUGH OXIDATION OF FERROUS IRON AND SEDIMENTATION-FILTRATION OF THE RESULTING IRON PRECIPITATE. A SYSTEM IN FINLAND THAT REMOVES 97 PERCENT OF THE IRON AND MANGANESE IS DESCRIBED BRIEFLY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010457
PUBLICATION DATE: JAN 84

TITLE: THE OCCURRENCE OF ALUMINUM IN DRINKING WATER.

PERSONAL AUTHOR: MILLER, ROBERT G.; AND OTHERS

DESCRIPTOR: *ALUMINUM; *DRINKING WATER; *OPERATIONS (WATER); *RESEARCH REPORTS; *SURVEYS; *WATER TREATMENT

DESCRIPTIVE NOTE: 84-91P.

ABSTRACT: ALUMINUM IS MORE LIKELY TO EXIST IN SURFACE WATER SOURCES THAN IN GROUNDWATER SOURCES. A RANDOM SELECTION OF 186 WATER UTILITIES WAS USED FOR OBTAINING WATER SAMPLES FOR THIS STUDY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010458

PUBLICATION DATE: JAN 84

TITLE: COMMITTEE REPORT: COMPARISON OF ALTERNATIVE SYSTEMS FOR CONTROLLING FLOW THROUGH FILTERS.

PERSONAL AUTHOR: AWWA FILTRATION COMMITTEE

DESCRIPTOR: *AUTOMATED SYSTEMS; *COMMITTEE REPORTS; *CONTROL SYSTEMS; *DRINKING WATER; *FILTRATION; *GRANULAR MEDIA FILTERS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 91-95P.

ABSTRACT: THIS REPORT DESCRIBES THE NEED FOR A FULL-SCALE COMPARISON OF CONSTANT-RATE AND DECLINING-RATE SYSTEMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010459

PUBLICATION DATE: JAN 84

TITLE: REVITALIZING CONCRETE PRESSURE PIPE.

DESCRIPTOR: *CONCRETE PRESSURE PIPE; *MAINTENANCE; *PIPE RELINING; *PIPE; *REHABILITATION; *WATER DISTRIBUTION; *WATER PIPE; SAN DIEGO (CALIFORNIA)

DESCRIPTIVE NOTE: 96-99P.

ABSTRACT: THE SAN DIEGO COUNTY WATER AUTHORITY HAS DEVELOPED AND APPLIED A NEW PROCESS FOR REHABILITATING DAMAGED OR DETERIORATED CONCRETE PRESSURE PIPE. THE PROCEDURE IS DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N1

IRIS ACCESSION NUMBER: EW010501

PUBLICATION DATE: JAN 84

TITLE: COMBINING CARBON WITH CONVENTIONAL CREATES COST-EFFECTIVE TREATMENT.

PERSONAL AUTHOR: BERNDT, C. L.; ROLLINS, R. M.

DESCRIPTOR: *ACTIVATED CARBON; *COSTS; *INDUSTRIAL WASTES; *MUNICIPAL WASTES; *OPERATIONS (WASTEWATER); *POWDERED ACTIVATED CARBON; *REGENERATED CARBON; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 34-35P.

AVAILABILITY: POLLUTION ENGINEERING; VXVI N1

IRIS ACCESSION NUMBER: EW010502

PUBLICATION DATE: JAN 84

TITLE: GC/MS MONITORING OF THE ORGANIC POLLUTANTS IN WATER SAMPLES.

PERSONAL AUTHOR: MARTINSEN, DAVID P.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DATA ANALYSIS; *CHROMATOGRAPHY; *COMPUTER APPLICATIONS; *GAS CHROMATOGRAPHY; *INSTRUMENTATION; *MONITORING; *EFFLUENTS; *MASS SPECTROMETRY; *ORGANIC COMPOUNDS; *WATER QUALITY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 36-38P.

ABSTRACT: DESCRIBED IS THE USE OF GAS CHROMATOGRAPH MASS SPECTROMETRY FOR ANALYSIS OF ORGANIC POLLUTANTS. SEVERAL EXAMPLES OF DISPLAYED INFORMATION ARE PRESENTED. PROCEDURES FOR DETERMINING DISPLAYS ARE PRESENTED.

AVAILABILITY: POLLUTION ENGINEERING; VXVI N1

IRIS ACCESSION NUMBER: EW010503

PUBLICATION DATE: JAN 84

TITLE: THERMAL REGENERAION OF ACTIVATED CARBON - EXPERIENCE SHOWS PROBLEMS AND PAYBACK.

PERSONAL AUTHOR: MCGINNIS, F. K., III

DESCRIPTOR: *ACTIVATED CARBON; *COSTS; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *REGENERATED CARBON; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: DESCRIBED IS THE USE OF ACTIVATED CARBON IN WATER AND WASTEWATER APPLICATIONS. PROCEDURES FOR REGENERATING CARBON ARE DESCRIBED. SOME OF THE PROBLEMS ENCOUNTERED AND RELATIVE COSTS ARE CONSIDERED.

AVAILABILITY: POLLUTION ENGINEERING; VXVI N1

IRIS ACCESSION NUMBER: EW010504

PUBLICATION DATE: JAN 84

TITLE: THE CASE FOR COMPUTERIZATION.

PERSONAL AUTHOR: PANTAGES, ANGIE

DESCRIPTOR: ANALYTICAL TECHNIQUES; *AUTOMATED CONTROLS; DATA REPORTING; *COMPUTERS; *COMPUTER APPLICATIONS; EMERGENCY RESPONSE; ENGINEERING DESIGN; ENERGY CONTROL; LABORATORIES; MODELS; PROCESS CONTROL; POLLUTION CONTROL; *TECHNOLOGY; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 48-58P.

ABSTRACT: THIS SECTION OF THE JOURNAL PROVIDES SNAPSHOTS OF THE ENVIRONMENTAL CONTROL COMPUTER-BASED APPLICATIONS, AND EXPLAINS HOW TECHNOLOGICAL CHANGE IS AFFECTING VARIOUS ASPECTS OF OPERATIONS.

AVAILABILITY: POLLUTION ENGINEERING; VXVI N1

IRIS ACCESSION NUMBER: EW010505

PUBLICATION DATE: JAN 84

TITLE: THE FALAJ--A TRADITIONAL CO-OPERATIVE SYSTEM OF WATER MANAGEMENT.

PERSONAL AUTHOR: SUTTON, SALLY

DESCRIPTOR: *ADMINISTRATION; *COSTS; *DRINKING WATER; *DEVELOPING COUNTRIES; *FINANCES; *GROUNDWATER; *MANAGEMENT; *OMAN; *OPERATIONS (WATER); *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 8-12P.

ABSTRACT: DESCRIBED IS THE FALAJ, A TRADITIONAL WATER MANAGEMENT SYSTEM USED IN OMAN. THE FALAJ CONSISTS OF A TUNNEL TO TAP GROUNDWATER AND TO BRING IT TO THE SURFACE FOR CROPS AND HOUSEHOLD USE.

AVAILABILITY: WATERLINES; V2 N3

IRIS ACCESSION NUMBER: EW010506

PUBLICATION DATE: JAN 84

TITLE: A ONE-TIER SYSTEM: THE TILONIA APPROACH TO HANDPUMP

MAINTENANCE.
PERSONAL AUTHOR: ROY, SANJIT

DESCRIPTOR: *HANDPUMPS; *EQUIPMENT; *INDIA; *MAINTENANCE; *PUMPS; *TRAINING; *WATER SUPPLY

DESCRIPTIVE NOTE: 13-16P.

ABSTRACT: DESCRIBED IS AN APPROACH TO HANDPUMP MAINTENANCE USED IN NORTHWESTERN INDIA. TRAINING OF MAINTENANCE PERSONNEL AND ADMINISTRATION ARE BOTH CONSIDERED.

AVAILABILITY: WATERLINES; V2 N3

IRIS ACCESSION NUMBER: EW010507

PUBLICATION DATE: JAN 84

TITLE: A SIMPLIFIED METHOD FOR DESIGNING ELEVATED WATER STORAGE TANKS.

PERSONAL AUTHOR: BRISCOE, JOHN

DESCRIPTOR: *DESIGN; *DEVELOPING COUNTRIES; *MOZAMBIQUE; *RESERVOIRS; *TANKS; *WATER TANKS; *WATER SUPPLY; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 18-19P.

ABSTRACT: DESCRIBED IS A SIMPLIFIED METHOD FOR DESIGNING ELEVATED WATER STORAGE TANKS FOR DEVELOPING COUNTRIES. THE TECHNIQUE HAS BEEN USED IN MOZAMBIQUE.

AVAILABILITY: WATERLINES; V2 N3

IRIS ACCESSION NUMBER: EW010508

PUBLICATION DATE: JAN 84

TITLE: TRADITIONAL WATER CLARIFICATION METHODS--USING SCIENTIFIC OBSERVATION TO MAXIMIZE EFFICIENCY.

PERSONAL AUTHOR: JAHN, SAMIA AL AZHARIA

DESCRIPTOR: *CLARIFICATION; *DEVELOPING COUNTRIES; *DRINKING WATER; *JAR TEST; *MORINGA OLEIFERA; *TURBIDITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 27-28P.

ABSTRACT: DESCRIBED ARE SOME TECHNIQUES FOR CLARIFYING WATER USING SEEDS OF A PLANT. THE TECHNIQUES DESCRIBED WERE USED IN THE SUDAN.

AVAILABILITY: WATERLINES; V2 N3

IRIS ACCESSION NUMBER: EW010509
PUBLICATION DATE: JAN 84

TITLE: A LOW-COST METHOD OF MONITORING WATER POLLUTION--BY BIOLOGICAL INDICATORS.

PERSONAL AUTHOR: CROSS, DOUGLAS

DESCRIPTOR: *BIOLOGICAL INDICATORS; *MONITORING; *SAMPLING; *SURFACE WATER; *WATER QUALITY; *WATER SUPPLY

DESCRIPTIVE NOTE: 29-32P.

ABSTRACT: SHORTAGES OF CHEMICALS IMPOSE SEVERE CONSTRAINTS ON WATER QUALITY TESTING, BUT OBSERVING THE CREATURES WHICH CAN SURVIVE IN A SURFACE WATER SOURCE WILL GIVE SOME IDEA OF ITS QUALITY. PROCEDURES FOR COLLECTING AND ANALYZING ORGANISMS ARE PROVIDED.

AVAILABILITY: WATERLINES; V2 N3

IRIS ACCESSION NUMBER: EW010510

PUBLICATION DATE: WIN 84

TITLE: A COMPUTERIZED GROUND WATER MONITORING SYSTEM.

PERSONAL AUTHOR: WAY, SHAO-CHIH; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPUTER APPLICATIONS; *COSTS; *GROUNDWATER; *HYDROLOGY; *MONITORING; *PUMPING TEST DATA; *WATER QUALITY

DESCRIPTIVE NOTE: 21-25P.

ABSTRACT: THIS ARTICLE DESCRIBES A COMPUTER AUTOMATED, HYDROLOGIC ANALYSIS SYSTEM DESIGNED TO ALLOW THE COLLECTION OF HIGH QUALITY, LONG-TERM PUMPING TEST DATA.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010511

PUBLICATION DATE: WIN 84

TITLE: CONSTRAINTS AND CATEGORIES OF VADOSE ZONE MONITORING DEVICES.

PERSONAL AUTHOR: EVERETT, LORNE G.; AND OTHERS

DESCRIPTOR: *GROUNDWATER; *INSTRUMENTATION; *MONITORING; *MONITORING TECHNIQUES; *SAMPLING; *SAMPLING METHODS; *VADOSE ZONE; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 26-32P.

ABSTRACT: DISCUSSED ARE VADOSE ZONE MONITORING DEVICES AND METHODS. IN GENERAL, MEASUREMENTS MADE IN THE VADOSE ZONE ARE TRYING TO DEFINE STORAGE, TRANSMISSION OF LIQUID WASTE,

AND POLLUTANT MOBILITY.
AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010512

PUBLICATION DATE: WIN 84

TITLE: AN OVERVIEW OF COMPUTER TECHNOLOGY USED IN GROUND WATER FIELD STUDIES: PART I: BASICS.

PERSONAL AUTHOR: RITCHEY, JOSEPH D.; COLLINS, MARK A.

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *FIELD STUDIES; *GROUNDWATER; *TECHNOLOGY

DESCRIPTIVE NOTE: 33-38P.

ABSTRACT: THIS IS PART I OF A TWO-PART SERIES REGARDING THE APPROPRIATE USE OF COMPUTERS IN GROUNDWATER FIELD STUDIES. PART I INCLUDES A BRIEF DESCRIPTION OF THE COMPONENTS THAT COMPRISE A COMPUTER AND IS INTENDED TO CLARIFY TERMINOLOGY AND ILLUSTRATE THE GENERAL CHARACTERISTICS OF THESE MACHINES.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010513

PUBLICATION DATE: WIN 84

TITLE: NEW TAPE FOR GROUND WATER MEASUREMENT.

PERSONAL AUTHOR: SANDERS, PAUL J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *GROUNDWATER; *INSTRUMENTATION; *MEASUREMENT; *MONITORING; *PROBES; *SAMPLING; *TECHNOLOGY

DESCRIPTIVE NOTE: 39-42P.

ABSTRACT: DESCRIBED IS A COMPOSITE TAPE WHICH CAN BE THE LINK TO VARIOUS SENSING DEVICES FOR MEASURING GROUNDWATER PARAMETERS. THE TAPE CONSISTS OF A STANDARD STEEL ENGINEERING TAPE WITH TWO 28-GAUGE WIRES ALONG ITS EDGE. AT THE BOTTOM END OF THE TAPE IS A PROBE WHICH CAN SENSE WATER LEVEL BY CONDUCTIVITY, A LAYER OF ORGANIC LIQUID BY AN OPTICAL DEVICE, OR TEMPERATURE, PH, DISSOLVED OXYGEN, ABSOLUTE CONDUCTIVITY, OR OTHER MEASUREMENTS THAT CAN BE MADE WITH A SMALL IN SITU PROBE.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010514

PUBLICATION DATE: WIN 84

TITLE: SOME OBSERVATIONS ON FIELD EXPERIENCES WITH MONITOR WELLS.

PERSONAL AUTHOR: HUNKIN, GEOFFREY G.; AND OTHERS

DESCRIPTOR: *FIELD STUDIES; *GROUNDWATER; *INSTRUMENTATION; *MONITORING; *RECOMMENDATIONS; *WELLS

DESCRIPTIVE NOTE: 43-45P.

ABSTRACT: FOR THIS REVIEW FEATURES WERE SELECTED THAT HAD BEEN FOUND TO BE IMPORTANT IN COMMERCIAL, HIGH-PRECISION WATER QUALITY SAMPLING IN WESTERN U.S. ENVIRONMENTS. THE NATURE OF THESE SOURCES, AS WELL AS PRACTICAL RECOMMENDATIONS FOR CORRECTIVE ACTION ARE CONSIDERED.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010515

PUBLICATION DATE: WIN 84

TITLE: HISTORY AND IMPLEMENTATION OF TOTAL ORGANIC HALOGEN METHODOLOGY AS AN INDICATOR OF GROUND WATER QUALITY.

PERSONAL AUTHOR: HARPER, FRED

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *EPA; *GROUNDWATER; *MEASUREMENT; *TOTAL ORGANIC HALOGEN; *TOX; *WATER QUALITY

DESCRIPTIVE NOTE: 46-48P.

ABSTRACT: DESCRIBED IS A HISTORY OF THE TOTAL ORGANIC HALOGEN (TOX) ANALYTICAL METHOD AND PRELIMINARY RESULTS OF A SURVEY TO HIGHLIGHT IMPLEMENTATION OF TOX IN GROUNDWATER MONITORING.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010516

PUBLICATION DATE: WIN 84

TITLE: COMPARISON OF ELECTRICAL RESISTIVITY METHODS FOR INVESTIGATION OF GROUND WATER CONDITIONS AT A LANDFILL SITE.

PERSONAL AUTHOR: SWEENEY, JERRY J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ELECTRICAL RESISTIVITY METHODS; GEOCHEMISTRY; *GROUNDWATER; *HYDROLOGY; *LANDFILLS; LAND USE; MONITORING; MODELS; *SAMPLING; *WATER QUALITY; *WATER TABLE

DESCRIPTIVE NOTE: 52-59P.

ABSTRACT: A BRIEF EXPLANATION AND COMPARISON OF METHODS USED AND RESULTS OF SURVEYS ARE DISCUSSED. FOLLOWING COMPLETION OF THE SURVEYS, THE DIPOLE DIPOLE DATA WERE MODELED WITH THE USE OF A FINITE-ELEMENT COMPUTER ALGORITHM. THE MODELS ARE COMPARED WITH GEOLOGICAL AND HYDROLOGICAL

DATA OBTAINED DURING THE DRILLING PHASE OF THE PROGRAM.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V4 N1

IRIS ACCESSION NUMBER: EW010517

PUBLICATION DATE: JAN 84

TITLE: ECONOMIC EVALUATION OF UPGRADING AERATION SYSTEMS.

PERSONAL AUTHOR: STENSTROM, MICHAEL K.; AND OTHERS

DESCRIPTOR: *AERATION SYSTEMS; *ECONOMICS; *EQUIPMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20-26P.

ABSTRACT: A DISCUSSION TO UPGRADE AERATION SYSTEMS SHOULD BE BASED ON MANY OPERATIONAL FACTORS AS WELL AS ON ECONOMICS. THIS PAPER EVALUATES THE ECONOMICS OF REPLACING AN OLDER, LESS EFFICIENT AERATION SYSTEM WITH A NEW, EFFICIENT SYSTEM.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010518

PUBLICATION DATE: JAN 84

TITLE: LANDFILL LEACHATE TREATMENT.

PERSONAL AUTHOR: KEENAN, JOHN D.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *LANDFILL LEACHATES; *LANDFILLS; *OPERATIONS (WASTEWATER); *RESEARCH; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 27-33P.

ABSTRACT: THIS PROJECT INVESTIGATED TREATMENT OF LANDFILL LEACHATES BY VARIOUS TREATMENT PROCESSES. ACTIVATED SLUDGE UNITS CAN PROVIDE EFFECTIVE TREATMENT IN EITHER SERIES OR PARALLEL OPERATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010519

PUBLICATION DATE: JAN 84

TITLE: PILOT TESTS PROVE INNOVATIVE, COST-SAVING WASTEWATER TREATMENT SYSTEM.

PERSONAL AUTHOR: CHRISTOPHER, STAN A.; AND OTHERS

DESCRIPTOR: *AERATION; *CLARIFICATION; *DESIGN; *COSTS; *FACILITIES; *OPERATIONS (WASTEWATER); *RESEARCH; *PERFORMANCE EVALUATION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 34-40P.

ABSTRACT: THIS PAPER EXAMINED SEVERAL TECHNIQUES OF WASTEWATER TREATMENT. A UNIQUE ARRANGEMENT OF THE AERATION, CLARIFICATION, AND SLUDGE WASTING FUNCTIONS ELIMINATED THE NEED FOR RETURN SLUDGE PUMPING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010520

PUBLICATION DATE: JAN 84

TITLE: THE COMPETITIVE GROWTH OF FLOC-FORMING AND FILAMENTOUS BACTERIA: A MODEL FOR ACTIVATED SLUDGE BULKING.

PERSONAL AUTHOR: LAU, ANTONIO O.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *DISSOLVED OXYGEN; *MODELS; *OPERATIONS (WASTEWATER); *RESEARCH; *SLUDGE BULKING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 52-61P.

ABSTRACT: USING EXPERIMENTALLY DERIVED COEFFICIENTS, IT WAS POSSIBLE TO MODEL THE RELATIONSHIP BETWEEN ORGANIC LOADING AND THE DISSOLVED OXYGEN CONCENTRATION REQUIRED TO PREVENT SLUDGE BULKING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010521

PUBLICATION DATE: JAN 84

TITLE: EFFECTS OF MULTIPLE DIGESTION ON SLUDGE.

PERSONAL AUTHOR: TORPEY, WILBUR N.; AND OTHERS

DESCRIPTOR: *ECONOMICS; *EFFLUENTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH; *SLUDGE; *SLUDGE DIGESTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 62-68P.

ABSTRACT: THE ECONOMICS OF SLUDGE DIGESTION WERE SIGNIFICANTLY IMPROVED AS A RESULT OF REDUCED SLUDGE VOLUME AND A LOWER VOLATILE SOLIDS CONTENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010522

PUBLICATION DATE: JAN 84

TITLE: RENOVATION OF WASTEWATER AT THE 23RD AVENUE RAPID INFILTRATION PROJECT.

PERSONAL AUTHOR: BOUWER, HERMAN; RICE, R. C.

DESCRIPTOR: *ARIZONA; *COSTS; IRRIGATION; *INFILTRATION; *OPERATIONS (WASTEWATER); *RESEARCH; RECREATION; *RECYCLING; *SECONDARY EFFLUENT; *SOIL AQUIFER TREATMENT; *WATER REUSE; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 76-83P.

ABSTRACT: WASTEWATER RENOVATION BY SOIL AQUIFER TREATMENT IS SUFFICIENT FOR IRRIGATION AND RECREATIONAL USES, AND IS A COST-EFFECTIVE PRETREATMENT FOR HIGHER REUSE APPLICATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010523

PUBLICATION DATE: JAN 84

TITLE: SOIL-AQUIFER TREATMENT USING PRIMARY EFFLUENT.

PERSONAL AUTHOR: RICE, R. C.; BOUWER, HERMAN

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *EFFLUENTS; *FILTRATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RESEARCH; *SOIL AQUIFER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 84-88P.

ABSTRACT: THIS STUDY WAS CONDUCTED TO DETERMINE THE HYDRAULIC LOADING CAPACITY WITH PRIMARY EFFLUENT UNDER FIELD CONDITIONS, THE MANAGEMENT PRACTICES REQUIRED FOR MAXIMUM LOADING, AND THE IMPROVEMENT OF THE EFFLUENT QUALITY AS IT MOVES THROUGH THE SOIL. THE STUDY INDICATED THAT SOIL AQUIFER TREATMENT OF PRIMARY EFFLUENT IS CAPABLE OF PRODUCING RENOVATED WATER AT A LOW COST ASSUMING LAND IS NOT HIGH PRICED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010524

PUBLICATION DATE: JAN 84

TITLE: DETERMINATION OF THE ENZYME ACTIVITY OF ACTIVATED SLUDGE BY METHYLENE BLUE REDUCTION.

PERSONAL AUTHOR: JORGENSEN, KIRSTEN PEITER

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ACTIVATED SLUDGE;

*METHYLENE BLUE; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 89-93P.

ABSTRACT: REPORTED IS WORK ON A METHOD TO DETERMINE THE ACTIVITY OF ACTIVATED SLUDGE. FOR SLUDGES CONTAINING TOXIC MATERIALS, THE METHYLENE BLUE METHOD HAS AN ADVANTAGE OVER THE TRADITIONAL METHODS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010525

PUBLICATION DATE: JAN 84

TITLE: USE OF DISSOLVED OXYGEN MODELING RESULTS IN THE MANAGEMENT OF RIVER QUALITY.

PERSONAL AUTHOR: RICKERT, DAVID A.

DESCRIPTOR: *AMMONIA; *DISSOLVED OXYGEN; *INDUSTRIAL WASTES; *MODELS; *OREGON; *RIVERS; *WATER QUALITY

DESCRIPTIVE NOTE: 94-101P.

ABSTRACT: DESCRIBED IS THE USE OF DISSOLVED OXYGEN MODELING TO MANAGE THE WATER QUALITY OF THE WILLAMETTE RIVER IN OREGON. DETERMINATION OF THE ROLE OF INDUSTRIAL AMMONIA IN OXYGEN DEPLETION LED TO REDUCING THE NEED FOR ADVANCED WASTE TREATMENT BY MUNICIPALITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N1

IRIS ACCESSION NUMBER: EW010589

PUBLICATION DATE: DEC 81

TITLE: AN UNDERSTANDING OF WATER LOSSES. PROCEEDINGS OF A SYMPOSIUM, LONDON, ENGLAND.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *CONSUMPTION; *LEAKAGE; *RECOMMENDATIONS; *WATER LOSSES; *WATER METERS; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 216P.

ABSTRACT: THIS SYMPOSIUM PROVIDED A FORUM IN WHICH INFORMATION AND VIEWS ON WATER LOSSES COULD BE DISCUSSED. THE TOPIC OF WATER LOSSES ENCOMPASSES SUCH ASPECTS AS LEAKAGE, UNDUE CONSUMPTION, METER ACCURACY, PER CAPITA USE, AND MEANS OF EXERCISING ECONOMIC CONTROL. THE SPECIFIC THEMES IN THIS PUBLICATION ARE: CATCHMENT LOSSES, UNACCOUNTED-FOR WATER, THE TRADITIONAL APPROACH TO WATER LOSSES, ALTERNATIVE WASTE CONTROL METHODS, WATER LOSSES AND THE CONSUMER, LEAKAGE CONTROL IN BELGIUM, AN ECONOMIC APPROACH TO WASTE CONTROL, AND THE BRITISH GOVERNMENT'S VIEW ON THE LOSS AND WASTE OF WATER.

AVAILABILITY: THE INSTITUTION OF WATER ENGINEERS AND SCIENTISTS, 31-33 HIGH HOLBORN, LONDON WC1V 6AX, ENGLAND

IRIS ACCESSION NUMBER: EW010590

PUBLICATION DATE: 83

TITLE: SAFETY AND HEALTH IN WASTEWATER SYSTEMS. SAFETY IN WASTEWATER WORKS.

DESCRIPTOR: *HEALTH; *INSTRUCTIONAL MATERIALS; *MANUALS; LABORATORY; OPERATIONS (WASTEWATER); *POST SECONDARY EDUCATION; *SAFETY; WASTEWATER COLLECTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 126P. PRICE: $19.00 MEMBER; $25.00 NON-MEMBER.

ABSTRACT: ONE OF THE FEDERATION'S MOST CONSISTENT BESTSELLERS, MOP 1 SAFETY IN WASTEWATER WORKS HAS BEEN COMPLETELY UPDATED AND EXPANDED. IT PRESENTS THE COMPLETE SPECTRUM OF SAFETY PRACTICES IN COLLECTION SYSTEMS, TREATMENT FACILITIES, CONFINED SPACES, AND THE LABORATORY. IN ORDER TO MAKE THE NEW EDITION EVEN MORE USEFUL, THE CONVENTIONAL BOOK BINDING HAS BEEN DISPENSED WITH. THE ENTIRE TEXT HAS BEEN PLACED INSIDE A 3-RING BINDER, MAKING REVISIONS, CORRECTIONS, AND DELETIONS THAT MUCH SIMPLER.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW010591

PUBLICATION DATE: 83

TITLE: NUTRIENT CONTROL.

DESCRIPTOR: ANALYTICAL TECHNIQUES; EFFLUENTS; EUTROPHICATION; ENVIRONMENTAL EFFECTS; *MANUALS; *NITROGEN; *NUTRIENTS; *NUTRIENT CONTROL; *PHOSPHORUS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 216P. PRICE: $22.50 MEMBER; $30.00 NON-MEMBER.

ABSTRACT: NUTRIENT CONTROL IS MANDATORY FOR DOMESTIC WASTEWATERS THAT DISCHARGE DIRECTLY OR INDIRECTLY TO LAKES OR RESERVOIRS TO PREVENT ACCELERATION OF EUTROPHICATION. THIS MANUAL COVERS: SOURCE AND QUANTITY OF NUTRIENTS; ANALYTICAL METHODS; ROLE AND IMPACT OF NUTRIENTS IN THE ENVIRONMENT; NITRIFICATION OF AMMONIA OXIDE; NITROGEN, PHOSPHOROUS, AND COMBINED NITROGEN AND PHOSPHOROUS REMOVAL; AND LAND TREATMENT.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW010592

PUBLICATION DATE: 83

TITLE: WATER REUSE.

DESCRIPTOR: CONSERVATION; *MANAGEMENT; *MANUALS; *PLANNING; *RECYCLING; WATER SUPPLY; *WATER REUSE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 128P. PRICE: $15.00 MEMBER; $20.00 NON-MEMBER.

ABSTRACT: WATER REUSE IDENTIFIES THE ONGOING CONCERNS RELATING TO RECYCLING WASTEWATER: SOURCES FOR WATER REUSE; SPECIFIC APPLICATIONS; REQUIRED TREATMENT PROCESSES AND SYSTEMS; MONITORING AND CONTROL INSTRUMENTATION; HEALTH ASPECTS; SOCIAL, LEGAL, AND INSTITUTIONAL ASPECTS; AND PLANNING AND MANAGEMENT TECHNIQUES. THE MANUAL ALSO DETAILS SIMPLE TO COMPLEX RECLAMATION SYSTEMS NECESSARY FOR REUSE OR RECYCLING. PROCESSES THAT DOUBLE AS REUSE APPLICATIONS ARE ALSO DISCUSSED.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW010593

PUBLICATION DATE: 83

TITLE: EXISTING SEWER EVALUATION AND REHABILITATION.
DESCRIPTOR: *EVALUATION; *FACILITIES; *MANUALS; *REHABILITATION; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 116P. PRICE: $13.50 MEMBER; $18.00 NON-MEMBER.

ABSTRACT: A GUIDE TO A COMPREHENSIVE SEWER EVALUATION. THREE MAJOR AREAS ARE PRESENTED: SEWER EVALUATION, REHABILITATION, AND THE EFFECTIVENESS OF RECONDITIONING SEWERS. WRITTEN FOR A BROAD AUDIENCE, INCLUDING ENGINEERS, MUNICIPALITIES, REGULATORY AGENCIES, AND ALL OTHERS WHO HAVE SOME RESPONSIBILITY FOR THE PLANNING, DESIGNING, CONSTRUCTING, FINANCING, REGULATING, OPERATING, OR MAINTAINING SEWER SYSTEMS. PUBLISHED JOINTLY BY WPCF AND THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE). THE MANUAL IS ILLUSTRATED WITH NUMEROUS CHARTS, DIAGRAMS, AND PHOTOGRAPHS.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW010594

PUBLICATION DATE: 83

TITLE: WASTEWATER FACILITY MANAGEMENT SKILL TRAINING PACKAGE.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTIONAL MATERIALS;

*MANAGEMENT; *POSTSECONDARY EDUCATION; *SUPERVISION; *TRAINING; UTILITIES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: THIS PACKAGE COURSE CONTAINS TAPE CASSETTES AND WRITTEN MATERIALS. PRICE: $75.00.

ABSTRACT: THIS COURSE IS DESIGNED TO TEACH MANAGEMENT CONCEPTS TO INDIVIDUALS WORKING IN THE WASTEWATER FIELD, AND OTHER UTILITY FUNCTIONS WHO ARE FIRST LINE SUPERVISORS OR SUPERINTENDENTS OF SMALL TO MEDIUM SIZED SYSTEMS. USING TAPE CASSETTES AND WRITTEN MATERIALS THE COURSE PRESENTS THE FOLLOWING: BASIC MANAGEMENT CONCEPTS INCLUDING THEORY AND APPLICATION OF PLANNING, ORGANIZATION, DIRECTION, AND CONTROLLING; BUDGETING; PERSONNEL; AND PUBLIC RELATIONS. THE COURSE IS RATED AT 3.5 CONTINUING EDUCATION UNITS (CEUS).

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW010595

TITLE: HANDBOOK OF WASTEWATER TREATMENT PROCESSES.

PERSONAL AUTHOR: VERNICK, ARNOLD S.; WALKER, ELWOOD C.

DESCRIPTOR: *BIOLOGICAL TREATMENT; *CHEMICAL TREATMENT; *HANDBOOKS; *OPERATIONS (WASTEWATER); *REFERENCE MATERIALS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 255P. PRICE: $38.50.

ABSTRACT: THIS HANDBOOK PRESENTS INFORMATION ON A WIDE RANGE OF TREATMENT PROCESSES - BOTH BIOLOGICAL AND CHEMICAL - INCLUDING COLLECTION AND DISPOSAL TECHNIQUES. ALL PERTINENT DATA FOR EACH PROCESS IS CONTAINED WITHIN A TWO PAGE SUMMARY. WHILE NOT INTENDED FOR DESIGN PURPOSES THE INFORMATION ENABLES THE DESIGNER TO MAKE INITIAL COMPARISONS BASED ON THE TREATMENT REQUIREMENTS TO PRODUCE GENERAL COST DATA. EACH LISTING CONTAINS DATA ON THE PROCESS TYPE AND DESCRIPTION, COMMON MODIFICATIONS, TECHNOLOGY STATUS, APPLICATIONS, LIMITATIONS, ENVIRONMENTAL IMPACT, TYPICAL EQUIPMENT REQUIRED AND NUMBER OF MANUFACTURERS, PERFORMANCE, DESIGN CONSIDERATIONS, RELIABILITY, AND REFERENCES. WHERE APPLICABLE THE FOLLOWING IS ALSO PROVIDED: REQUIRED CHEMICALS, RESIDUALS GENERATED, POTENTIAL OF IMPROVED TOXICS MANAGEMENT, POTENTIAL FOR INCREASED ENVIRONMENTAL BENEFITS, AND JOINT TREATMENT POTENTIAL. GENERAL COST DATA CURVES ARE PROVIDED FOR INITIAL CONSTRUCTION COST COMPARISONS AND FOR INITIAL OPERATION AND MAINTENANCE. SCHEMATICS AND DIAGRAMS SUPPLEMENT THE DATA SHEETS. THE BIBLIOGRAPHY CONTAINS 263 LISTINGS AND THERE IS AN APPENDIX ON GENERATING COST DATA. SOME OF THE CONTENTS INCLUDE COLLECTION SYSTEMS, DISPOSAL OPTIONS, BIOLOGICAL TREATMENT PROCESSES (SUSPENDED GROWTH PROCESSES, FIXED FILM PROCESSES, PHYSICAL PROCESSES) AND PHYSICAL CHEMICAL PROCESSES WITH NITROGEN REMOVAL, PHOSPHORUS REMOVAL, TERTIARY METHODS, SLUDGE TREATMENT AND DISPOSAL AND NUMEROUS OTHER TOPICS.

AVAILABILITY: MARCEL DEKKER, INC., 270 MADISON AVENUE, NEW YORK, NY 10016

IRIS ACCESSION NUMBER: EW010596

PUBLICATION DATE: MAR 83

TITLE: RESERVOIR SYSTEM REGULATION FOR WATER QUALITY CONTROL.

PERSONAL AUTHOR: WILLEY, R. G.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPUTER APPLICATIONS; *MODELS; *MANAGEMENT; *RESERVOIRS; *SYSTEM REGULATIONS; *WATER QUALITY

DESCRIPTIVE NOTE: 19P. PRICE CODE: PC A02/MF A01. AD-A130 829/5.

ABSTRACT: A COMPUTER MODEL CAPABLE OF EVALUATING WATER QUALITY CONDITIONS IN LARGE RESERVOIR SYSTEMS WAS RECENTLY DEVELOPED BY THE CORPS OF ENGINEERS. THE MODEL, SIMULATION OF FLOOD CONTROL AND CONSERVATION SYSTEMS (INCLUDING WATER QUALITY ANALYSIS), HEC-5Q, PROVIDES A COMPREHENSIVE WATER QUANTITY MODEL WITH FAIRLY SIMPLE WATER QUALITY ROUTINES. THE HEC-5Q CAN EVALUATE HOW TO OPERATE EACH RESERVOIR IN A SYSTEM FOR THE BEST OVERALL REGULATION TO MEET BOTH WATER QUANTITY AND WATER QUALITY OBJECTIVES AT ALL POINTS OF INTEREST IN THE SYSTEM. AN OVERVIEW IS PROVIDED OF THE MODEL CAPABILITIES AND CONCEPTS REGARDING METHOD OF REGULATION ANALYSIS. A MAXIMUM OF EIGHT WATER QUALITY PARAMETERS CAN BE ANALYZED. THESE INCLUDE WATER TEMPERATURE, A MAXIMUM OF THREE CONSERVATIVE AND THREE NON-CONSERVATIVE PARAMETERS, AND DISSOLVED OXYGEN. THE PLANNED FUTURE DEVELOPMENT AND AVAILABILITY IS DISCUSSED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010597

PUBLICATION DATE: 83

TITLE: PRUDENT PRACTICES FOR DISPOSAL OF CHEMICALS FROM LABORATORIES.

DESCRIPTOR: *CHEMICALS; *DISPOSAL; *GUIDELINES; *HAZARDOUS WASTES; *LABORATORY PROCEDURES; *LABORATORY SAFETY; *LEGISLATION; *REGULATIONS; *SAFETY; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 304P. PRICE: $16.50.

ABSTRACT: THIS PUBLICATION PROVIDES A DETAILED GUIDE FOR THE SAFE DISPOSAL OF CHEMICALS FROM LABORATORIES. ALSO INCLUDED ARE INTERPRETATIONS OF LEGISLATION AND REGULATIONS GOVERNING THE HANDLING OF HAZARDOUS WASTE. THE APPENDICES CONTAIN EXTENSIVE LISTS OF REGULATIONS, PROBLEM CHEMICALS, GUIDELINES FOR DISPOSAL, AND SOURCES OF INFORMATION.

AVAILABILITY: NATIONAL ACADEMY PRESS, 2101 CONSTITUTION AVENUE, NW, WASHINGTON, DC 20418

IRIS ACCESSION NUMBER: EW010598

PUBLICATION DATE: JUL 83

TITLE: ANALYTICAL METHODS--SPECTROSCOPY; CHROMATOGRAPHY; TEMPERATURE MEASUREMENT; COMPUTERIZED SYSTEMS.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *COMPUTERS; *COMPUTERIZED SYSTEMS; *LABORATORY PROCEDURES; *MEASUREMENT; *STANDARDS; *SPECTROSCOPY; *TEMPERATURE MEASUREMENT

DESCRIPTIVE NOTE: 900P. PRICE: $40.50 MEMBER; $45.00 LIST PRICE.

ABSTRACT: THIS PUBLICATION CONTAINS STANDARDS, MANY NEW AND REVISED, FOR ANALYTICAL METHODS. CONTENTS INCLUDE SPECTROSCOPY, CHROMATOGRAPHY, TEMPERATURE MEASUREMENT, AND COMPUTERIZED SYSTEMS.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103

IRIS ACCESSION NUMBER: EW010599

PUBLICATION DATE: 82

TITLE: PROCEEDINGS OF THE NINTH ANNUAL CONFERENCE ON WETLANDS RESTORATION AND CREATION.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *ENVIRONMENT; *LAND USE; *RESEARCH REPORTS; *WATER QUALITY; *WATER RESOURCES; *WETLANDS

DESCRIPTIVE NOTE: 277P.

ABSTRACT: THIS PUBLICATION IS A COMPILATION OF PAPERS PRESENTED AT THE NINTH ANNUAL CONFERENCE ON WETLANDS RESTORATION AND CREATION. PAPERS ARE INCLUDED ON RESTORATION OF WETLANDS, MAINTAINING WETLANDS, AND DECISION MAKING REGARDING WETLANDS AND DEVELOPING WETLANDS.

AVAILABILITY: HILLSBOROUGH COMMUNITY COLLEGE, ENVIRONMENTAL STUDIES CENTER, DALE MARBY CAMPUS, P. O. BOX 30030, TAMPA, FL 33630

IRIS ACCESSION NUMBER: EW010603

PUBLICATION DATE: 82

TITLE: DEVELOPMENT OF METHODS OF DETERMINING INORGANIC COMPONENTS IN WATERS IN 1981.

PERSONAL AUTHOR: PILIPENKO, A. T.; TERLETSKAYA, A. V.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *ELEMENTS; *INORGANIC COMPOUNDS; *LABORATORY PROCEDURES; *METALS; *RESEARCH REPORTS; *SURVEYS; *WATER

DESCRIPTIVE NOTE: 39-66P.

ABSTRACT: THIS ARTICLE IS A SURVEY OF INVESTIGATIONS PUBLISHED IN 1981 CONCERNED WITH METHODS OF DETERMINING INORGANIC COMPONENTS IN WATER. INVESTIGATIONS REVIEWED INCLUDE RESEARCH FROM ALL PARTS OF THE WORLD.

AVAILABILITY: SOVIET JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY; V4 N5

IRIS ACCESSION NUMBER: EW010604

PUBLICATION DATE: 82

TITLE: WATER, HYDROGEN BONDS, STRUCTURE, THERMAL MOVEMENT MECHANISMS.

PERSONAL AUTHOR: SHAKHPARONOV, M. I.

DESCRIPTOR: *BIBLIOGRAPHIES; *HYDROGEN BONDS; *ICE; *RESEARCH; *SURVEYS; *THERMAL MOVEMENT; *WATER

DESCRIPTIVE NOTE: 1-13P.

ABSTRACT: A SURVEY IS PRESENTED OF THE RESULTS OF INVESTIGATIONS OF HYDROGEN BONDS, STRUCTURE AND THERMAL MOVEMENT MECHANISMS OF LIQUID WATER AND HEXAGONAL ICE PUBLISHED IN RECENT YEARS AND WHICH SUPPLEMENT OR CHANGE IDEAS PRESENTED IN OTHER SURVEYS. A SUBSTANTIAL BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: SOVIET JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY; V4 N6

IRIS ACCESSION NUMBER: EW010605

PUBLICATION DATE: 82

TITLE: ABSORPTION OF ORGANIC SUBSTANCES DISSOLVED IN WATER BY IONITES. (A SURVEY OF THE LITERATURE FOR 1975-1980.)

PERSONAL AUTHOR: LEVCHENKO, T. M.; SAVCHINA, L. A.

DESCRIPTOR: *ABSORPTION; *CHEMICAL REACTIONS; *IONS; *LITERATURE REVIEWS; *ORGANIC COMPOUNDS; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 14-28P.

ABSTRACT: DATA IS PRESENTED FROM THE LITERATURE ON THE ABSORPTION FROM AQUEOUS SOLUTIONS OF PHENOLS, AROMATIC AND ALIPHATIC ACIDS, AROMATIC AND ALIPHATIC AMINES, ALCOHOLS AND ETHERS, ALKYSULFATES, PROTEINS AND ANTIBIOTICS, AND HUMIC AND FULVIC ACIDS BY IONITES OF VARIOUS TYPES. ATTENTION IS GIVEN TO THE POSSIBILITY OF "POISONING" OF ION EXCHANGE RESINS AND METHODS OF RESTORING IONITE CAPACITY ARE CONSIDERED.

AVAILABILITY: SOVIET JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY; V4 N6

IRIS ACCESSION NUMBER: EW010606

PUBLICATION DATE: 82

TITLE: THE DEVELOPMENT OF METHODS OF DETERMINING ORGANIC COMPONENTS IN WATER IN 1981.

PERSONAL AUTHOR: TERLETSKAYA, A. V.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LITERATURE REVIEWS; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *WASTEWATER; *WATER

DESCRIPTIVE NOTE: 46-63P.

ABSTRACT: THIS SURVEY EXAMINES METHODS OF CONCENTRATION, FRACTIONATION AND DETERMINATION OF VARIOUS CLASSES OF ORGANIC COMPOUNDS IN POTABLE, NATURAL, AND WASTEWATERS PUBLISHED IN THE SOVIET AND OTHER LITERATURE IN 1981. METHODS OF DETERMINING GENERAL WATER QUALITY INDICES ARE ALSO DISCUSSED.

AVAILABILITY: SOVIET JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY; V4 N6

IRIS ACCESSION NUMBER: EW010607

PUBLICATION DATE: OCT 83

TITLE: WETLANDS FOR WASTEWATER TREATMENT.

PERSONAL AUTHOR: BENFORADO, JAY

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DEMONSTRATION PROJECTS; *LAND USE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT; *WETLANDS; WATER HYACINTH

DESCRIPTIVE NOTE: 14-15P.

ABSTRACT: DESCRIBED ARE VARIOUS PROJECTS AND A REPORT REGARDING NATURAL AND ARTIFICIAL WETLAND PROCESSES FOR WASTEWATER TREATMENT. RESULTS OF THE APPLICATIONS APPEAR TO BE PROMISING, BUT NEED MORE PILOT AND DEMONSTRATION PROJECTS.

AVAILABILITY: EPA JOURNAL; V9 N2

IRIS ACCESSION NUMBER: EW010608

PUBLICATION DATE: NOV 83

TITLE: TELEMETRIC CONTROL OF WATER DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: VON RADER, JOHN E.

DESCRIPTOR: *AUTOMATION; *AUTOMATIC CONTROLS; *MANAGEMENT; *REMOTE CONTROLS; *TELEMETRY; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 542-549P.

ABSTRACT: APPLICATIONS OF TELEMETRY TO WATER DISTRIBUTION SYSTEMS RANGE FROM SIMPLE REMOTE CONTROL SYSTEMS TO SOPHISTICATED DIGITAL SOFTWARE PACKAGES PROGRAMMED FOR SPECIFIC CONDITIONS. THE CAPABILITIES OF ANALOG AND DIGITIL SYSTEMS ARE EXPLAINED AND COMPARED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010609

PUBLICATION DATE: NOV 83

TITLE: CLOSED-LOOP PUMPING.

PERSONAL AUTHOR: CAVANAUGH, GERALD J.

DESCRIPTOR: *CLOSED-LOOP PUMPING; *COLORADO; *PUMPS; *PUMPING; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 550-552P.

ABSTRACT: THE EXPERIENCES OF THE DENVER (COLORADO) WATER DEPARTMENT WITH CLOSED-LOOP PUMPING, OR CLOSED PRESSURE ZONES, SERVE TO ILLUSTRATE THE CIRCUMSTANCES UNDER WHICH SUCH SYSTEMS ARE PRACTICAL AND EFFECTIVE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010610

PUBLICATION DATE: NOV 83

TITLE: THE EFFECT OF UPSTREAM PIPING ON SWING-CHECK VALVES.

PERSONAL AUTHOR: RAHMEYER, WILLIAM J.

DESCRIPTOR: *CHECK VALVES; *DESIGN; *FLOW CHARACTERISTICS; *SWING-CHECK VALVES; *VALVES

DESCRIPTIVE NOTE: 553-555P.

ABSTRACT: THE RELATIONSHIP OF UPSTREAM FLOW VARIABLES TO THE FLOW CHARACTERISTICS OF CHECK VALVES IS EXAMINED. THE PHENOMENA OF CAVITATION, VIBRATION AND NOISE, MINIMUM FLOW REQUIRED TO OPEN THE VALVE FULLY, INTERNAL MOTION, AND WEAR OF THE COMPONENTS ARE DISCUSSED. THESE EFFECTS SHOULD BE CONSIDERED IN THE DESIGN, APPLICATION, AND USE OF SWING-CHECK VALVES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010611

PUBLICATION DATE: NOV 83

TITLE: MAINTAINING DISTRIBUTION SYSTEM VALVES.

PERSONAL AUTHOR: SKORCZ, DAN

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *PLANNING; *PREVENTIVE MAINTENANCE; *RECORDKEEPING; *VALVES; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 556-558P.

ABSTRACT: A VALVE MAINTENANCE PROGRAM IMPLEMENTED IN ECONOMICAL STAGES CAN RESULT IN IMMEDIATE IMPROVEMENT IN DISTRIBUTION SYSTEM RELIABILITY. SUGGESTIONS ARE GIVEN FOR PLANNING A PROGRAM, EXERCISING VALVES, AND MAINTAINING RECORDS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010612

PUBLICATION DATE: NOV 83

TITLE: CHECK VALVES WITH BRAINS.

PERSONAL AUTHOR: LESCOVICH, JOSEPH E.

DESCRIPTOR: *CHECK VALVES; *EQUIPMENT; *PUMPS; *VALVES; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 559-563P.

ABSTRACT: VARIOUS USES OF POWER-OPERATED CHECK VALVES ARE DESCRIBED. SOME OF THE CONTROL ARRANGEMENTS SHOWN IN THE FIGURES CAN BE USED IN LIEU OF MORE COSTLY VARIABLE-SPEED PUMPS FOR SPECIAL FLOW CONDITIONS OR PRESSURE REQUIREMENTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010613

PUBLICATION DATE: NOV 83

TITLE: COLIFORMS IN A WATER DISTRIBUTION SYSTEM; A REMEDIAL APPROACH.

PERSONAL AUTHOR: HUDSON, LEVERNE D.; AND OTHERS

DESCRIPTOR: *DISINFECTION; *BACTERIA; *COLIFORM BACTERIA; *ILLINOIS; *PUBLIC HEALTH; *WATER DISTRIBUTION; *WATER TREATMENT

DESCRIPTIVE NOTE: 564-568P.

ABSTRACT: DESCRIBED IS A COLIFORM INFESTATION OF WATER

MAINS IN AN ILLINOIS COMMUNITY AND INTENSIVE MEASURES TAKEN TO CONTROL BACTERIAL GROWTH IN THE WATER TREATMENT PROCESS AND IN THE DISTRIBUTION SYSTEM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010614

PUBLICATION DATE: NOV 83

TITLE: RELATIONSHIPS BETWEEN STANDARD PLATE COUNTS AND OTHER PARAMETERS IN WATER DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: GOSHKO, MARC A.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BACTERIA; *LABORATORY PROCEDURES; *MICROBIOLOGY; *RESEARCH REPORTS; *SANITATION; *STANDARD PLATE COUNTS; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 568-571P.

ABSTRACT: DATA FROM A STUDY INDICATED THAT AN INCREASE IN SPC FOR A WATER DISTRIBUTION SYSTEM MAY SIGNAL A BREAKDOWN IN SANITARY BARRIERS, BUT, ON THE OTHER HAND, IT MAY BE THE RESULT OF BACTERIAL CONTAMINATION BY SOME OTHER MECHANISM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010615

PUBLICATION DATE: NOV 83

TITLE: AXIAL AND BENDING BEHAVIOR OF PIPELINE JOINTS.

PERSONAL AUTHOR: SINGHAL, A. C.; BENAVIDES, J. C.

DESCRIPTOR: *DUCTILE-IRON PIPES; *PERFORMANCE EVALUATION; *PIPES; *PIPE JOINTS; *RESEARCH REPORTS; *WATER PIPES

DESCRIPTIVE NOTE: 572-578P.

ABSTRACT: PIPELINE JOINTS (DUCTILE-IRON PIPES WITH PUSH-ON RUBBER GASKETS) WERE TESTED TO DETERMINE THEIR STRUCTURAL BEHAVIOR WHEN SUBJECTED TO STATIC LOADING AND RELOADING CONDITIONS. RESULTS ARE REPORTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010616

PUBLICATION DATE: NOV 83

TITLE: A STATISTICAL EXPERIMENTAL DESIGN FOR COMPARISON TESTING OF ANALYTICAL PROCEDURES.

PERSONAL AUTHOR: GIBBS, PAUL H.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPARISON TESTING; *COMPUTER APPLICATIONS; *LABORATORY PROCEDURES; *OPERATIONS (WATER); *SAMPLING; *WATER TREATMENT

DESCRIPTIVE NOTE: 578-582P.

ABSTRACT: AN EXPERIMENT WAS DESIGNED FOR COMPARISON TESTING OF AN APPROVED STANDARD TEST METHOD AND AN ALTERNATIVE TEST METHOD. THE DESIGN WAS APPLIED IN TESTS UNDER ACTUAL OPERATING CONDITIONS AT WATER TREATMENT PLANTS. STATISTICAL ANALYSIS OF AN EXAMPLE DATA SET IS DETAILED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V75 N11

IRIS ACCESSION NUMBER: EW010617

PUBLICATION DATE: OCT 83

TITLE: CLINICAL TECHNIQUES FOR SLUDGE ANALYSIS.

PERSONAL AUTHOR: HUNT, DOUGLAS M.; WATERHOUSE, FRANK E.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DISEASES; *LABORATORY PROCEDURES; *PARASITES; *PUBLIC HEALTH; *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 5-6P.

ABSTRACT: THERE IS A GROWING CONCERN ABOUT THE INCIDENCE OF PARASITIC INFECTIONS IN THE UNITED STATES DUE TO INCREASING INTERNATIONAL TRAVEL AND AN INFLUX OF IMMIGRANTS FROM THIRD WORLD COUNTRIES. THE NEED FOR ACCURATE LABORATORY EXAMINATION IS DISCUSSED.

AVAILABILITY: THE BENCHSHEET; V5 N5

IRIS ACCESSION NUMBER: EW010618

PUBLICATION DATE: NOV 83

TITLE: INNOVATIVE MODIFICATIONS BRING PLANT UP TO DATE AND UP TO SIZE.

PERSONAL AUTHOR: SMITH, CHARLES N.

DESCRIPTOR: *DESIGN; *FACILITIES; *FACILITY MODIFICATIONS; *MAINE; *OPERATIONS (WASTEWATER); *SECONDARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 8-9P.

ABSTRACT: DESCRIBED ARE MODIFICATIONS TO A WASTEWATER TREATMENT FACILITY IN MAINE TO UPGRADE THE OPERATION.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010619

PUBLICATION DATE: NOV 83

TITLE: REFINING THE HAZEN-WILLIAMS PROGRAMMABLE CALCULATOR METHOD.

PERSONAL AUTHOR: CRUMB, S. FRANK

DESCRIPTOR: *CALCULATORS; *CALCULATOR PROGRAMS; *HAZEN-WILLIAMS EQUATION; *FLUID FLOW; *FLOW MEASUREMENT; *PIPES; *WATER FLOW

DESCRIPTIVE NOTE: 10P.

ABSTRACT: PRESENTED IS A PROGRAM FOR THE HAZEN-WILLIAMS EQUATION THAT CAN OPERATE ON A TI-55 PROGRAMMABLE CALCULATOR.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010620

PUBLICATION DATE: NOV 83

TITLE: PROJECT MANAGEMENT TESTS OUT AT WATER UTILITY.

PERSONAL AUTHOR: HERSCH, PAUL

DESCRIPTOR: *ADMINISTRATION; *COLORADO; COMMUNICATION; *MANAGEMENT; OPERATIONS (WATER); PERSONNEL; *UTILITIES; *WATER DEPARTMENTS; WATER TREATMENT

DESCRIPTIVE NOTE: 22P.

ABSTRACT: DESCRIBED IS A MODIFICATION OF MANAGEMENT OF THE DENVER WATER DEPARTMENT FROM A LINE-STYLE OF MANAGEMENT TO PROJECT-MANAGEMENT CONTROL.

AVAILABILITY: WATER ENGINEERING 8 MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010621

PUBLICATION DATE: NOV 83

TITLE: TRAINING--ONE OF THE PILLARS OF SUCCESS.

PERSONAL AUTHOR: HILL, WILLIAM; TOBEL, TERRY

DESCRIPTOR: *CALIFORNIA; FACILITIES; INSTRUCTION; *NEW MEXICO; *MAINTENANCE; *MANAGEMENT; *NEW YORK; *OPERATOR TRAINING; *OPERATIONS (WASTEWATER); PERSONNEL; *TRAINING PROGRAMS; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24-27P.

ABSTRACT: THE LONG TERM OPERATIONAL SUCCESS OF ANY TREATMENT PLANT DEPENDS AT LEAST AS MUCH ON ITS PEOPLE AS ON ITS DESIGN AND CONSTRUCTION. AN ONGOING TRAINING PROGRAM CAN KEEP PERSONNEL SKILLED, CURRENT, AND EFFECTIVE.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010622

PUBLICATION DATE: NOV 83

TITLE: THE CARE AND FEEDING OF A CHEMICAL FEEDER.

PERSONAL AUTHOR: BAKER, ROBERT J.; HEUBER, WAYNE B.

DESCRIPTOR: *CHEMICAL FEEDERS; CHEMICALS; DESIGN; *EQUIPMENT; FACILITIES; *MAINTENANCE; *OPERATIONS; *OPERATOR TRAINING; TRAINING; UTILITIES

DESCRIPTIVE NOTE: 27-28,51P.

ABSTRACT: A SPECIAL KIND OF OPERATION AND MAINTENANCE IS REQUIRED FOR CHEMICAL FEEDERS. OPERATORS NEED TO KNOW HOW TO MAINTAIN AND OPERATE THE EQUIPMENT. UTILITIES NEED TO BE SURE THE EQUIPMENT IS PROPERLY DESIGNED, FACILITIES ARE PROPERLY LAID OUT, CHEMICALS ARE CLEAN AND OF THE FORM DESIGNED FOR THE EQUIPMENT.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010623

PUBLICATION DATE: NOV 83

TITLE: VERSATILE ASPHALT: LAGOON AND RESERVOIR LINER.

PERSONAL AUTHOR: CRAWFORD, CAMPBELL

DESCRIPTOR: *ASPHALT; *FACILITIES; *LAGOONS; *LANDFILLS; *PERFORMANCE EVALUATION; *RESERVOIRS; *SEALERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30-33P.

ABSTRACT: ASPHALT IS VERY EFFECTIVE AS A SEALER IN A NUMBER OF POND-TYPE APPLICATIONS. APPLICATIONS AND ADVANTAGES OF ASPHALT USE ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010624

PUBLICATION DATE: NOV 83

TITLE: COMPUTER IMPROVES COMPOSITES.

PERSONAL AUTHOR: HARMS, LELAND L.; SMITH, HERB

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CALCULATIONS; COMPUTER APPLICATIONS; *COMPUTER PROGRAMS; *COMPOSITE SAMPLES; *LABORATORY PROCEDURES; *SAMPLING; *WASTEWATER; *WATER

DESCRIPTIVE NOTE: 39-40P.

ABSTRACT: ANALYTICAL RESULTS ARE ONLY AS GOOD AS THE SAMPLE, AND COMPOSITES ARE NO EXCEPTION TO THE RULE. DESCRIBED IS A CONVENIENT WAY OF USING A COMPUTER PROGRAM TO PREPARE A WATER OR WASTEWATER COMPOSITE QUICKLY AND ACCURATELY.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010625

PUBLICATION DATE: NOV 83

TITLE: MAINTENANCE MANAGEMENT IS TOPIC OF SELF-STUDY COURSE.

DESCRIPTOR: *COURSES; *INSTRUCTION; *MAINTENANCE; *MANAGEMENT; *POSTSECONDARY EDUCATION; *UTILITY MAINTENANCE PROGRAMS; WATER TREATMENT; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 44P.

ABSTRACT: DESCRIBED IS A SELF STUDY COURSE FOR MAINTENANCE MANAGEMENT IN THE WATER AND WASTEWATER FIELDS. TOPICS INCLUDED IN THE COURSE ARE PLANNING, ORGANIZING, STAFFING, DIRECTING AND CONTROLLING. COURSE MATERIALS INCLUDE A STUDY GUIDE AND TWO TEXTBOOKS. THE COURSE IS OFFERED BY MICHIGAN STATE UNIVERSITY.

AVAILABILITY: WATER ENGINEERING & MANAGEMENT; V130 N12

IRIS ACCESSION NUMBER: EW010626

PUBLICATION DATE: JUL 83

TITLE: CONTROL POLICIES FOR SPECIFIC WATER POLLUTANTS.

DESCRIPTOR: *DRINKING WATER; *HEALTH; *INDUSTRIAL WASTES; *OPERATIONS (WATER); *POLLUTION; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER TREATMENT; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 246P. PRICE: $17.00.

ABSTRACT: THE NUMBER OF SPECIFIC POLLUTANTS LIKELY TO BE FOUND REGULARLY IN THE RIVERS OF INDUSTRIAL COUNTRIES IS GROWING CONTINUALLY AND HAS NOW REACHED SEVERAL THOUSAND. THIS REPORT DESCRIBES WAYS OF IDENTIFYING SUCH CONTAMINANTS, THEIR ORIGINS AND PATHWAYS, THEIR POSSIBLE EFFECTS ON HUMAN HEALTH THROUGH DRINKING WATER, AND FEASIBLE CONTROL MEASURES.

AVAILABILITY: OECD PUBLICATIONS AND INFORMATION CENTER, 1750 PENNSYLVANIA, N.W., SUITE 1207 RP, WASHINGTON, DC 20006

IRIS ACCESSION NUMBER: EW010627

PUBLICATION DATE: AUG 83

TITLE: OIL SPILL REMOVAL TECHNIQUES AND EQUIPMENT. 1974-AUGUST, 1983 (CITATIONS FROM OCEANIC ABSTRACTS).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACT; *EQUIPMENT; *OIL SPILLS; *OIL SPILL REMOVAL; *POLLUTION; *TECHNOLOGY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 248P. PRICE CODE: PC N01/MF N01.

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING EQUIPMENT AND TECHNIQUES FOR CONTROL, DISPERSION, AND DISPOSAL OF OIL SPILLS. TOPICS INCLUDE CHEMICAL DISPERSANTS AND MECHANICAL SKIMMERS. EMPHASIS IS PLACED ON HARBORS, ESTUARIES, AND THE RESULTING IMPACT ON WATER BIRDS AND MARINE LIFE. (THIS UPDATED BIBLIOGRAPHY CONTAINS 308 CITATIONS, 53 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010628

PUBLICATION DATE: 83

TITLE: COL-LEC-TOR.

DESCRIPTOR: *DESIGN; *GAMES; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; *SAFETY; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: INCLUDES A GAME BOARD, QUESTION CARDS, PLAYING PIECES AND A RULE AND ANSWER BOOKLET. PRICE: $8.50 MEMBERS; $11.50 NON-MEMBERS.

ABSTRACT: THIS IS AN INSTRUCTIONAL BOARD GAME BASED ON THE DESIGN OF A WASTEWATER COLLECTION SYSTEM. PLAYERS PROGRESS AROUND THE GAME BOARD BY TOSSING DICE AND DRAWING QUESTIONS CARDS IN FIVE AREAS RELATING TO WASTEWATER COLLECTION: WASTEWATER, SAFETY, DESIGN, MATH AND COLLECTION SYSTEMS. THE ANSWER BOOKLET IS DESIGNED TO GUIDE PLAYERS TOWARD THE CORRECT ANSWER. PLAYERS OFTEN APPLY THEIR OWN KNOWLEDGE AND EXPERIENCE IN GROUP DISCUSSIONS TO ARRIVE AT AN ANSWER BASED ON THEIR INDIVIDUAL SITUATIONS. INCLUDED IS A GAME BOARD, QUESTION CARDS, PLAYING PIECES AND A RULE AND ANSWER BOOKLET.

AVAILABILITY: NATIONAL ENVIRONMENTAL TRAINING ASSOCIATION, P. O. BOX 346, VALPARAISO, IN 46383

IRIS ACCESSION NUMBER: EW010629

PUBLICATION DATE: 83

TITLE: COLLECTION SYSTEMS MATH.

DESCRIPTOR: *ARITHMETIC; *INSTRUCTIONAL MATERIALS; *MATHEMATICS; *OPERATIONS (WASTEWATER); *POST SECONDARY EDUCATION; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 108P. PRICE: $9.50 MEMBER; $12.50 NON-MEMBER.

ABSTRACT: MOST MATH ERRORS ARE CAUSED BY IMPROPER PROCEDURES - NOT INADEQUATE MATH SKILLS. COLLECTION SYSTEMS MATH TEACHES A PROCEDURAL APPROACH TO MATH PROBLEMS, HELPING COLLECTION SYSTEM WORKERS BECOME MORE CONFIDENT AND ACCURATE IN MATH CALCULATIONS. SEVEN CHAPTERS COVER: BASIC AND RELATED MATH; VELOCITY; RATE OF FLOW; DETENTION TIME; LOADING; POPULATION EQUIVALENT; AND SLOPE OR GRADE. IN EACH CHAPTER, STUDENTS FIRST LEARN TO DEFINE THE PROBLEM AND UNDERSTAND ITS IMPORTANCE, THEN THEY REVIEW A SAMPLE PROBLEM, WORK A PRACTICE PROBLEM AND CHECK THE SOLUTIONS. THE MANUAL PROVIDES PRACTICE AND INCLUDES AN APPENDIX WITH PRACTICE PROBLEMS AND SOLUTIONS, AND FORMULAS AND CONVERSION FACTORS.

AVAILABILITY: NATIONAL ENVIRONMENTAL TRAINING ASSOCIATION, P. O. BOX 346, VALPARAISO, IN 46383

IRIS ACCESSION NUMBER: EW010630

PUBLICATION DATE: NOV 83

TITLE: ACTIVATED CARBON TREATMENT RESTORES ACTON WATER SUPPLY.

PERSONAL AUTHOR: MACLEOD, JOHN E.; ALLAN, GEORGE R.

DESCRIPTOR: *ACTIVATED CARBON; *CONTAMINATION; *DRINKING WATER; *CHEMICALS; *MASSACHUSETTS; *OPERATIONS (WATER); *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 32-35P.

ABSTRACT: A DISTRICT IN MASSACHUSETTS LOST ONE MILLION GALLONS OF WATER PER DAY, 40 PERCENT OF ITS WATER SUPPLY WHEN TWO WELLS WERE FOUND CHEMICALLY CONTAMINATED. ACTIVATED CARBON WAS USED TO REMOVE CONTAMINANTS.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N11

IRIS ACCESSION NUMBER: EW010631

PUBLICATION DATE: NOV 83

TITLE: DECENTRALIZED WASTEWATER PLAN FAVORED.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DECENTRALIZED SYSTEMS; *FACILITIES; *MANAGEMENT; *NEW YORK; *OPERATIONS (WASTEWATER); *ONSITE DISPOSAL; *WASTEWATER DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 34,36P.

ABSTRACT: DESCRIBED ARE WASTEWATER DISPOSAL PROBLEMS AND

SOLUTIONS IN WOODSTOCK, NEW YORK. THE COMMUNITY FOUND THAT DECENTRALIZED SYSTEMS PROVIDE A VIABLE ALTERNATIVE TO THE LARGE, CONVENTIONAL METHODS OF WASTEWATER TREATMENT.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N11

IRIS ACCESSION NUMBER: EW010632

PUBLICATION DATE: NOV 83

TITLE: DATA PROCESSING SURVEY SHOWS USE IN MULTIPLYING.

PERSONAL AUTHOR: ANDERBERG, KEN

DESCRIPTOR: *ADMINISTRATION; *BUDGETS; *DATA PROCESSING; *FUNCTIONS; *LOCAL GOVERNMENTS; *MANAGEMENT; *SURVEYS; *UTILITIES

DESCRIPTIVE NOTE: 42-43P.

ABSTRACT: ACCORDING TO THE SURVEY REPORTED IN THIS ARTICLE 83 PERCENT OF THE RESPONDENTS FROM LOCAL GOVERNMENT SAID THEY USE DATA PROCESSING. MOST INDICATE THEIR SYSTEMS ARE IN-HOUSE AND THAT BUDGETS FOR DATA PROCESSING ARE INCREASING. FUNCTIONS FOR WHICH DATA PROCESSING IS USED ARE DISCUSSED.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N11

IRIS ACCESSION NUMBER: EW010633

PUBLICATION DATE: NOV 83

TITLE: PLAN HELPS AUTOMATION IN VIRGINIA.

PERSONAL AUTHOR: HAM, JAMES D.

DESCRIPTOR: *AUTOMATION; *DATA PROCESSING; *MANAGEMENT; *PLANNING; *VIRGINIA

DESCRIPTIVE NOTE: 44,48P.

ABSTRACT: DESCRIBED IS THE DEVELOPMENT OF AN AUTOMATED DATA PROCESSING OPERATION IN A VIRGINIA COMMUNITY.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N11

IRIS ACCESSION NUMBER: EW010634

PUBLICATION DATE: NOV 83

TITLE: COMPUTER-AIDED DRAFTING SOLVES REVISION PROBLEMS.

PERSONAL AUTHOR: SUSSKIND, JOHN

DESCRIPTOR: *COMPUTER APPLICATIONS; *DRAFTING; *DESIGN; *FACILITIES; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 54,56P.

ABSTRACT: DESCRIBED IS A DRAFTING FIRM THAT REDUCED A MUNICIPAL SEWER PROJECT TIME-FRAME BY SIX MONTHS THROUGH THE USE OF A COMPUTER-AIDED DESIGN DRAFTING SYSTEM.

AVAILABILITY: AMERICAN CITY & COUNTY; V98 N11

IRIS ACCESSION NUMBER: EW010635

PUBLICATION DATE: AUG 83

TITLE: SUPPLEMENT TO MANUAL ON WATER.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BRINE; *ELECTRODES; *FILTRATION; *IONS; *LABORATORY EQUIPMENT; *LABORATORY PROCEDURES; *MEMBRANES; *MEMBRANE FILTRATION; *MEASUREMENT; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 47P. PRICE: $9.60 MEMBER; $12.00 NON-MEMBER.

ABSTRACT: THIS SUPPLEMENT TO THE MANUAL ON WATER SHOULD BE OF SPECIAL INTEREST AND USE TO THOSE INVOLVED WITH THE MEASUREMENT AND TREATMENT OF THE MICROBIOLOGICAL AND IONIC QUALITY OF WATER AND WATER-BORNE WASTES. THE BOOK IS DIVIDED INTO TWO CHAPTERS. THE FIRST CHAPTER DEALS WITH ION SELECTIVE ELECTRODES. A BRIEF HISTORY OF MEMBRANES AND MEMBRANE FILTER DEVELOPMENTS IS PRESENTED IN THE SECOND CHAPTER.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103, AATN: SALES SERVICE DEPARTMENT.

IRIS ACCESSION NUMBER: EW010636

TITLE: TRACE ANALYSIS - VOLUMES 1 AND 2.

PERSONAL AUTHOR: LAWRENCE, J. F.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMISTRY; *INORGANIC COMPOUNDS; *INSTRUMENTATION; *ORGANIC COMPOUNDS; *REFERENCE MATERIALS; *TRACE ANALYSIS

DESCRIPTIVE NOTE: V1-344; V2-288P. PRICE: VOLUME 1 $44.50; VOLUME 2 $35.00.

ABSTRACT: THESE VOLUMES BRING TOGETHER DETAILED INFORMATION ON THE APPLICATIONS OF ANALYTICAL CHEMISTRY IN THE DETECTION, IDENTIFICATION, AND QUANTIFICATION OF TRACE QUANTITIES OF SUBSTANCES IN MANY DIFFERENT SAMPLE TYPES. BOTH VOLUMES GIVE STATE-OF-THE-ART CRITICAL DISCUSSIONS OF SELECTED TOPICS INCLUDING THE USE OF HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) FOR ORGANIC AND INORGANIC TRACE ANALYSIS.

AVAILABILITY: ACADEMIC PRESS, INC., P. O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10113

IRIS ACCESSION NUMBER: EW010637

TITLE: INTRODUCTION TO SAFETY IN THE CHEMICAL LABORATORY.

PERSONAL AUTHOR: FREEMAN, N. T.; WHITEHEAD, J.

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMISTRY; *LABORATORY PROCEDURES; *REFERENCE MATERIALS; *SAFETY

DESCRIPTIVE NOTE: 234P. PRICE: $29.00.

ABSTRACT: THIS GENERAL WORK TELLS YOU THE SAFETY PRECAUTIONS THAT CAN PREVENT SERIOUS ACCIDENTS. CHAPTERS ON ORGANIZING THE LAB FOR SAFETY, OUTLINING THE DANGERS OF LAB EQUIPMENT AND OF COMMONLY USED CHEMICALS, COMPRESSED GASES, ELECTROMAGNETIC RADIATION HAZARDS, AND FIRST AID ARE INCLUDED.

AVAILABILITY: ACADEMIC PRESS, INC., P. O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10133

IRIS ACCESSION NUMBER: EW010638

TITLE: HAZARD ASSESSMENT OF CHEMICALS - VOLUME 2.

PERSONAL AUTHOR: SAXENA, J.; FISHER, F.

DESCRIPTOR: *CHEMICALS; *ENVIRONMENTAL IMPACT; *HAZARD ASSESSMENT; *HEALTH; *PUBLIC HEALTH; *REFERENCE MATERIALS; *TOXICOLOGY

DESCRIPTIVE NOTE: 384P. PRICE: $45.00. SET PRICE FOR VOLUMES 1 & 2 $89.50.

ABSTRACT: THROUGH SUBJECT REVIEWS AND CASE HISTORIES OF TOPICAL AND CHEMICAL CLASSES, THESE BOOKS PRESENT SIGNIFICANT DEVELOPMENTS IN THE AREA OF HAZARD ASSESSMENT. TOPICS INCLUDE ENVIRONMENTAL AND HEALTH EFFECTS OF CHEMICALS, REPRODUCTIVE TOXICOLOGY OF AQUATIC ORGANISMS, AZAARENES, AND DISCUSSION OF THE PRIMARY AND SECONDARY SOURCES FOR OBTAINING INFORMATION ON CHEMICALS.

AVAILABILITY: ACADEMIC PRESS, INC., P. O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10113

IRIS ACCESSION NUMBER: EW010639

PUBLICATION DATE: NOV 83

TITLE: TIPS AND TECHNIQUES.

PERSONAL AUTHOR: LOWELL, ROSS

DESCRIPTOR: *LIGHTING; *PHOTOGRAPHY; *RECOMMENDATIONS; *TECHNIQUES

DESCRIPTIVE NOTE: 32-34,57P.

ABSTRACT: THIS ARTICLE PROVIDES IDEAS AND SUGGESTIONS THAT CAN HELP WHEN CREATING A LIGHTING SET-UP AND MAKING THE FINAL SHOT. THE IDEAS ARE APPLICABLE TO STILL PHOTOGRAPHS, FILMS, AND VIDEO.

AVAILABILITY: TECHNICAL PHOTOGRAPHY; V15 N11

IRIS ACCESSION NUMBER: EW010640

PUBLICATION DATE: NOV 83

TITLE: USE A DELAY ON ANY FLASH.

PERSONAL AUTHOR: BAILEY, JIM

DESCRIPTOR: *FLASH DELAYS; *INTERFACES; *PHOTOGRAPHY

DESCRIPTIVE NOTE: 38-39P.

ABSTRACT: DESCRIBED IS THE USE OF A FLASH DELAY FOR PHOTOGRAPHY. AN INTERFACE IS FREQUENTLY NEEDED; INSTRUCTIONS FOR CONSTRUCTING ONE ARE PROVIDED.

AVAILABILITY: TECHNICAL PHOTOGRAPHY; V15 N11

IRIS ACCESSION NUMBER: EW010641

PUBLICATION DATE: NOV 83

TITLE: ARITHMETIC ACCURATE EXPOSURE CALCULATIONS IN CLOSE-UP PHOTOGRAPHY.

PERSONAL AUTHOR: SHELTON, S. M.

DESCRIPTOR: *CLOSE-UP PHOTOGRAPHY; *EXPOSURE; *EXPOSURE FORMULAS; *PHOTOGRAPHY; *TECHNIQUES

DESCRIPTIVE NOTE: 40-41P.

ABSTRACT: CLOSE-UP PHOTOGRAPHY REQUIRES CAREFUL CALCULATIONS TO DETERMINE CORRECT LIGHT EXPOSURES. THIS ARTICLE PROVIDES FORMULAS THAT CAN BE USED EFFECTIVELY.

AVAILABILITY: TECHNICAL PHOTOGRAPHY; V15 N11

IRIS ACCESSION NUMBER: EW010642

PUBLICATION DATE: NOV 83

TITLE: READING EXPOSURE.

PERSONAL AUTHOR: BEHREND, JACK

DESCRIPTOR: *EXPOSURE; *FILMS; *LIGHTING; *LIGHT METERS; *PHOTOGRAPHY; *TECHNIQUES

DESCRIPTIVE NOTE: 46-47P.

ABSTRACT: SUGGESTIONS FOR OBTAINING CORRECT LIGHT EXPOSURE ARE PROVIDED.

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AVAILABILITY: TECHNICAL PHOTOGRAPHY; V15 N11

IRIS ACCESSION NUMBER: EW010643

PUBLICATION DATE: JUN 83

TITLE: ENVIRONMENTAL IMPACT ASSESSMENT: NATIONAL APPROACHES AND INTERNATIONAL NEEDS.

PERSONAL AUTHOR: BURTON, IAN; AND OTHERS

DESCRIPTOR: *ENVIRONMENTAL IMPACT ASSESSMENT; *ENVIRONMENT; *EVALUATION; *INTERNATIONAL NEEDS; *LEGISLATION; *MODELS; *NATIONAL APPROACHES; *PERFORMANCE EVALUATION; *RECOMMENDATIONS; *TRENDS

DESCRIPTIVE NOTE: 133-150P.

ABSTRACT: THIS PAPER EXAMINES THE SPREAD AND DEVELOPMENT OF ENVIRONMENTAL IMPACT ASSESSMENT SINCE 1970. THE PAPER IS DIVIDED INTO THREE PARTS. THE FIRST PART REVIEWS FORMS OF EIA INTRODUCED IN THE WESTERN INDUSTRIAL COUNTRIES AND CONTRASTS THESE WITH SELECTED SOCIALIST COUNTRIES. THE SECOND PART CONSIDERS SOME LIMITATIONS OF IMPACT ASSESSMENT AND PART THREE CONSIDERS PROGRESS THAT HAS BEEN MADE.

AVAILABILITY: ENVIRONMENTAL MONITORING & ASSESSMENT; V3 N2

IRIS ACCESSION NUMBER: EW010644
PUBLICATION DATE: JUN 83

TITLE: VISUAL TECHNIQUES FOR THE DETECTION OF WATER QUALITY TRENDS: DOUBLE-MASS CURVES AND CUSUM FUNCTIONS.

PERSONAL AUTHOR: CLUIS, DANIEL A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CANADA; *CUSUM FUNCTIONS; *DOUBLE-MASS CURVES; *MONITORING; *TRENDS; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 173-184P.

ABSTRACT: DESCRIBED ARE WATER QUALITY DETECTION TECHNIQUES USED FOR ASSESSING WATER. APPLICATIONS OF THE TECHNIQUES ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL MONITORING & ASSESSMENT; V3 N2

IRIS ACCESSION NUMBER: EW010645

PUBLICATION DATE: JUN 83

TITLE: ASSESSING IMPACTS OF POWER PLANTS ON FISH POPULATIONS: A GENERAL STRATEGY.

PERSONAL AUTHOR: RAGO, PAUL J.; AND OTHERS

DESCRIPTOR: *ENVIRONMENTAL IMPACTS; *ENVIRONMENTAL IMPACT ASSESSMENT; *EVALUATION; *FISH; *MODELS; *POWER PLANTS

DESCRIPTIVE NOTE: 185-201P.

ABSTRACT: DESCRIBED IS A GENERAL STRATEGY FOR ASSESSING IMPACTS OF POWER PLANTS ON FISH POPULATIONS.

AVAILABILITY: ENVIRONMENTAL MONITORING & ASSESSMENT; V3 N2

IRIS ACCESSION NUMBER: EW010646

PUBLICATION DATE: NOV 83

TITLE: WHAT MAKES A GOOD MANAGER?

PERSONAL AUTHOR: RICHARDS, ROBERT W.

DESCRIPTOR: *BUDGETING; *COMMUNICATION; *DECISION MAKING; *MANAGERS; *MANAGEMENT; *MANAGEMENT STYLE

DESCRIPTIVE NOTE: 40,42,44&46P.

ABSTRACT: DESCRIBED ARE 10 ASPECTS OF MANAGEMENT. A BRIEF COMMENTARY IS PROVIDED FOR EACH.

AVAILABILITY: CONSULTING ENGINEER; V61 N5

IRIS ACCESSION NUMBER: EW010647
PUBLICATION DATE: NOV 83

TITLE: AREA-WIDE WATER MAIN REPLACEMENT.

PERSONAL AUTHOR: ANDERSON, WILLIAM; MARONEK, ARTHUR E.

DESCRIPTOR: *CONSTRUCTION; *FINANCING; *OPERATIONS (WATER); *PUMP STATIONS; *PIPES; *WASHINGTON; *WATER MAINS; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: 44-45P.

ABSTRACT: DESCRIBED IS A WATER MAIN REPLACEMENT PROJECT IN SEATTLE, WASHINGTON.

AVAILABILITY: PUBLIC WORKS; V114 N11

IRIS ACCESSION NUMBER: EW010648

PUBLICATION DATE: NOV 83

TITLE: INSTRUMENTS YOU CAN RELY ON - PART I.

PERSONAL AUTHOR: KNUDSEN, DAG I.; AND OTHERS

DESCRIPTOR: *INSTALLATION; *INSTRUMENTATION; *MAINTENANCE; *MEASUREMENT; *PERFORMANCE EVALUATION; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 50-52P.
ABSTRACT: DESCRIBED ARE THREE DOMINANT REASONS WHY INSTRUMENT INSTALLATIONS ARE NOT PRODUCING THE DESIRED RESULTS. THESE ARE (1) MISAPPLICATION, (2) MISINSTALLATION, AND (3) IMPROPER MAINTENANCE.

AVAILABILITY: PUBLIC WORKS; V114 N11

IRIS ACCESSION NUMBER: EW010649

PUBLICATION DATE: NOV 83

TITLE: DUAL PUMPING STATIONS SERVE NEW TREATMENT FACILITY.

DESCRIPTOR: *ARKANSAS; *FACILITIES; *PUMPS; *PUMP STATIONS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 56-67P.

ABSTRACT: PUMP STATIONS IN SERIES INCREASE EFFICIENCY OF WASTEWATER DELIVERY TO A TREATMENT PLANT IN ARKANSAS. A GENERAL DESCRIPTION OF THE PUMPING SYSTEM IS PROVIDED.

AVAILABILITY: PUBLIC WORKS; V114 N11

IRIS ACCESSION NUMBER: EW010650

PUBLICATION DATE: NOV 83
TITLE: ODESSA SOLVES A WATER PROBLEM - IN A HURRY.

PERSONAL AUTHOR: KLINK, ROBERT E.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *ENGINEERING; *FACILITIES; *MANAGEMENT; *PLANNING; *TEXAS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER STORAGE

DESCRIPTIVE NOTE: 58-60P.

ABSTRACT: RAPID DEVELOPMENT IN A SMALL CITY IN TEXAS REQUIRED INCREASED WATER DISTRIBUTION WITHIN A SHORT PERIOD OF TIME.

AVAILABILITY: PUBLIC WORKS; V114 N11

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*FLOW MEASUREMENT (2) EW010222 EW010619
*FLUID FLOW (2) EW010326 EW010619
FOOD TECHNOLOGY (1) EW005545
*FORECASTING (1) EW010389
*FORESTS (1) EW010388
*FUNCTIONS (1) EW010632
*GAMES (1) EW010628

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*GAS CHROMATOGRAPHY (1) EW010502
*GAS USE (1) EW010328
GEOCHEMISTRY (1) EW010516
*GEOTEXTILE LINERS (1) EW010350
*GRAB SAMPLES (1) EW010335
*GRANULAR ACTIVATED CARBON (2) EW009963 EW010274
GRANULAR ACTIVATED CARBON (1) EW010410
*GRANULAR MEDIA FILTERS (1) EW010458
*GREAT LAKES (1) EW010353
*GROUNDWATER (16) EW009418 EW010281 EW010336 EW010363 EW010373 EW010391 EW010400 EW010411 EW010505 EW010510 EW010511 EW010512 EW010513 EW010514 EW010515 EW010516
GROUNDWATER (1) EW009419
*GUIDELINES (7) EW010282 EW010314 EW010369 EW010373 EW010377 EW010386 EW010597
*HANDBOOKS (1) EW010595
HANDBOOKS (1) EW005545
*HANDPUMPS (2) EW010383 EW010506
*HAZARD ASSESSMENT (2) EW010403 EW010638
HAZARDOUS MATERIALS (3) EW010318 EW010319 EW010320
*HAZARDOUS WASTES (3) EW010122 EW010415 EW010597
*HAZARDOUS WASTE SITES (1) EW010122
*HAZEN-WILLIAMS EQUATION (1) EW010619
*HEALTH (4) EW005545 EW010590 EW010626 EW010638
*HEALTH EDUCATION (1) EW010243
*HEAT (1) EW010350
*HEAT TREATMENT (1) EW010194
*HEAVY METALS (2) EW010413 EW010442
*HERBICIDES (1) EW010362
*HISTORY (1) EW010308
*HOMES (1) EW010312
HOUSING (1) EW005545
*HUMAN RESOURCE DEVELOPMENT (1) EW010002
*HYDRAULIC CHARACTERISTICS (1) EW010325

*HYDRAULICS	(2)	EW010224 EW010326
*HYDROGEN BONDS	(1)	EW010604
*HYDROLOGIC CYCLE	(1)	EW010395
*HYDROLOGY	(5)	EW010373 EW010391 EW010411 EW010510 EW010516
*HYDROMETEOROLOGY	(1)	EW010389
*HYDROSPHERE	(1)	EW010400
*ICE	(1)	EW010604
*ILLINOIS	(1)	EW010613
INCENTIVES	(1)	EW010412
*INCINERATION	(2)	EW010278 EW010415
INDEXES	(5)	EW010318 EW010319 EW010320 EW010321 EW010322
*INDIA	(1)	EW010506
*INDICATOR ORGANISMS	(1)	EW010282
*INDUSTRIAL COMPLIANCE	(2)	EW010370 EW010371
*INDUSTRIAL WASTES	(12)	EW008973 EW009235 EW010119 EW010277 EW010374 EW010413 EW010416 EW010419 EW010437 EW010501 EW010525 EW010626
*INDUSTRY	(1)	EW010270
*INFECTIOUS DISEASES	(2)	EW010414 EW010437
*INFILTRATION	(1)	EW010522
*INFORMATION DISSEMINATION	(1)	EW010351
INFORMATION DISSEMINATION	(5)	EW010318 EW010319 EW010320 EW010321 EW010322
*INFORMATION NEEDS	(1)	EW010119
*INHIBITION	(1)	EW010441
*INORGANIC COMPOUNDS	(3)	EW010437 EW010603 EW010636
*INORGANIC SUBSTANCES	(1)	EW010278
*INSPECTION	(1)	EW010385
*INSTALLATION	(3)	EW010375 EW010427 EW010648
*INSTITUTIONAL CONSTRAINTS	(1)	EW010315
*INSTRUCTION	(8)	EW008622 EW009999 EW010002 EW010003 EW010006 EW010324 EW010423 EW010625
INSTRUCTION	(1)	EW010621
*INSTRUCTIONAL DESIGN	(1)	EW010423
*INSTRUCTIONAL MATERIALS	(28)	EW005545 EW010194 EW010195 EW010252 EW010253 EW010318 EW010319 EW010320 EW010321 EW010322 EW010324 EW010349 EW010380 EW010384 EW010391

		EW010392 EW010394 EW010395 EW010396 EW010397 EW010401 EW010402 EW010414 EW010416 EW010590 EW010594 EW010628 EW010629
INSTRUCTIONAL MATERIALS	(1)	EW010419
*INSTRUMENTATION	(12)	EW010330 EW010339 EW010341 EW010389 EW010398 EW010411 EW010502 EW010511 EW010513 EW010514 EW010636 EW010648
*INTEGRATED CIRCUITS	(1)	EW010270
*INTERFACES	(1)	EW010640
*INTERNATIONAL NEEDS	(1)	EW010643
*INTERVIEWS	(1)	EW010004
*IONS	(2)	EW010605 EW010635
*IRON	(2)	EW010455 EW010456
*IRRIGATION	(3)	EW010308 EW010316 EW010377
IRRIGATION	(1)	EW010522
*ISOTOPES	(1)	EW010400
*JAR TEST	(1)	EW010508
*JOB PERFORMANCE	(1)	EW010346
*LABORATORIES	(1)	EW010433
LABORATORIES	(1)	EW010504
*LABORATORY ANALYSTS	(1)	EW009234
*LABORATORY EQUIPMENT	(2)	EW010433 EW010635
*LABORATORY FACILITIES	(1)	EW010433
*LABORATORY PROCEDURES	(20)	EW008639 EW009234 EW010240 EW010242 EW010348 EW010364 EW010399 EW010433 EW010444 EW010454 EW010597 EW010598 EW010603 EW010606 EW010614 EW010616 EW010617 EW010624 EW010635 EW010637
*LABORATORY SAFETY	(1)	EW010597
*LAGOONS	(3)	EW010276 EW010362 EW010623
*LAKE ERIE	(1)	EW010353
*LAKES	(5)	EW008961 EW010281 EW010353 EW010362 EW010408
*LAND APPLICATION	(5)	EW010238 EW010313 EW010315 EW010340 EW010445
*LANDFILL LEACHATES	(1)	EW010518
*LANDFILLS	(6)	EW010175 EW010328 EW010415 EW010516 EW010518 EW010623
*LAND RECLAMATION	(1)	EW010315
LAND RECLAMATION	(1)	EW009419

*LAND TREATMENT	(1)	EW010316
*LAND USE	(5)	EW009419 EW010238 EW010388 EW010599 EW010607
LAND USE	(1)	EW010516
*LEAKAGE	(1)	EW010589
*LEARNING	(3)	EW010000 EW010006 EW010423
*LEARNING FACILITATION	(1)	EW010006
*LEGISLATION	(4)	EW009419 EW010352 EW010597 EW010643
*LIGHTING	(2)	EW010639 EW010642
*LIGHT METERS	(1)	EW010642
*LIME STABILIZATION	(2)	EW010175 EW010334
*LISTENING	(2)	EW010001 EW010005
*LITERATURE REVIEWS	(4)	EW008973 EW010119 EW010605 EW010606
*LOAD DESIGN	(1)	EW009542
*LOCAL GOVERNMENTS	(1)	EW010632
*LOCAL PROGRAMS	(1)	EW010314
*LOUISIANA	(1)	EW010372
*MAINE	(1)	EW010618
*MAINTENANCE	(26)	EW009235 EW009236 EW009967 EW010174 EW010239 EW010241 EW010266 EW010271 EW010310 EW010313 EW010339 EW010385 EW010421 EW010432 EW010435 EW010436 EW010449 EW010451 EW010453 EW010459 EW010506 EW010611 EW010621 EW010622 EW010625 EW010648
MAINTENANCE	(2)	EW010173 EW010264
*MANAGEMENT	(49)	EW008961 EW009235 EW009999 EW010001 EW010003 EW010216 EW010224 EW010225 EW010235 EW010236 EW010237 EW010239 EW010266 EW010271 EW010273 EW010309 EW010310 EW010312 EW010313 EW010314 EW010336 EW010346 EW010360 EW010361 EW010384 EW010391 EW010397 EW010409 EW010411 EW010415 EW010421 EW010422 EW010429 EW010430 EW010434 EW010447 EW010505 EW010592 EW010594 EW010596 EW010608 EW010620 EW010621 EW010625 EW010631 EW010632 EW010633 EW010646 EW010650
*MANAGEMENT EDUCATION	(1)	EW010422
*MANAGEMENT STYLE	(1)	EW010646
*MANAGEMENT SYSTEMS	(1)	EW010271
*MANAGERS	(2)	EW010344 EW010646
*MANGANESE	(2)	EW010455 EW010456
*MANGANESE OXIDATION	(1)	EW010424
*MANNING'S "N"	(1)	EW010325

*MANUALS (6) EW010375 EW010386 EW010590 EW010591 EW010592 EW010593
*MARKING REQUIREMENTS (1) EW009543
*MARYLAND (1) EW010367
*MASSACHUSETTS (1) EW010630
*MASS SPECTROMETRY (1) EW010502
*MATHEMATICAL MODELING (1) EW010408
*MATHEMATICS (1) EW010629
*MEASUREMENT (8) EW009237 EW010341 EW010348 EW010513 EW010515 EW010598 EW010635 EW010648
*MEASUREMENT INSTRUMENTS (1) EW010246
*MEASUREMENT TECHNIQUES (1) EW010330
*MEETINGS (1) EW010342
*MEMBRANE FILTRATION (1) EW010635
*MEMBRANES (1) EW010635
*METALS (2) EW010442 EW010603
*METERING PUMPS (1) EW010380
*METHYLENE BLUE (1) EW010524
*METRIC SYSTEM (1) EW009237
*MICHIGAN (1) EW009235
*MICROBIOLOGY (3) EW010364 EW010406 EW010614
MICROBIOLOGY (1) EW010410
*MICROCOMPUTERS (1) EW010431
*MINNESOTA (1) EW010272

*MODELS (15) EW009417 EW010236 EW010274 EW010275 EW010329 EW010330 EW010403 EW010408 EW010442 EW010446 EW010520 EW010525 EW010596 EW010643 EW010645
MODELS (2) EW010504 EW010516
*MONITORING (14) EW009417 EW010311 EW010314 EW010335 EW010336 EW010341 EW010398 EW010502 EW010509 EW010510 EW010511 EW010513 EW010514 EW010644
MONITORING (2) EW010411 EW010516
*MONITORING TECHNIQUES (1) EW010511
*MORALE (1) EW010346
*MORINGA OLEIFERA (1) EW010508
*MOTORS (1) EW010223

*MOZAMBIQUE	(1)	EW010507			
*MUNICIPALITIES	(2)	EW010312	EW010368		
*MUNICIPAL WASTES	(2)	EW010119	EW010501		
*MUTAGENIC SUBSTANCES	(1)	EW010445			
*NATIONAL APPROACHES	(1)	EW010643			
*NATIONAL PRIORITIES LIST	(1)	EW010122			
*NATIONAL PROBLEMS	(1)	EW010311			
*NATURAL RESOURCES	(3)	EW010361	EW010391	EW010395	
NATURAL RESOURCES	(1)	EW010241			
*NATURAL WATERS	(2)	EW010401	EW010402		
*NEEDS	(1)	EW010216			
*NEPAL	(1)	EW010264			
*NETHERLANDS	(1)	EW010347			
*NEVADA	(1)	EW010350			
*NEW MEXICO	(1)	EW010621			
*NEW YORK	(3)	EW010282	EW010621	EW010631	
*NITRIFICATION	(2)	EW010443	EW010444		
*NITROGEN	(1)	EW010591			
*NONEQUILIBRIA	(2)	EW010401	EW010402		
*NORTHEAST UNITED STATES	(1)	EW010392			
NSF	(1)	EW010351			
*NUTRIENT CONTROL	(1)	EW010591			
*NUTRIENTS	(1)	EW010591			
*OBJECTIVES	(2)	EW009417	EW010430		
*OBSERVATION	(1)	EW010420			
*OCCUPATIONAL HEALTH	(1)	EW005545			
*OCEAN DUMPING	(2)	EW010352	EW010425		
*OCEANS	(4)	EW010119	EW010282	EW010404	EW010405
*OFF-GAS MEASUREMENT TECHNIQUES	(1)	EW010330			
*OHIO	(1)	EW010428			
*OIL	(1)	EW010357			
*OIL RECOVERY	(1)	EW010357			

*OIL SPILL REMOVAL (1) EW010627

*OIL SPILLS (2) EW010357 EW010627

*OMAN (1) EW010505

*ONSITE DETENTION (1) EW010338

*ONSITE DISPOSAL (1) EW010631

*OPEN RESERVOIRS (1) EW010449

*OPERATIONS (3) EW010339 EW010380 EW010622

*OPERATIONS (WASTES) (1) EW010397

*OPERATIONS (WASTEWATER) (78) EW008973 EW009235 EW009236 EW009237 EW010172 EW010175 EW010194
EW010195 EW010237 EW010240 EW010271 EW010272 EW010273 EW010274 EW010276
EW010277 EW010278 EW010279 EW010281 EW010309 EW010310 EW010313 EW010314
EW010316 EW010317 EW010328 EW010329 EW010330 EW010331 EW010332 EW010333
EW010334 EW010335 EW010353 EW010354 EW010355 EW010360 EW010365 EW010374
EW010384 EW010413 EW010416 EW010418 EW010419 EW010421 EW010425 EW010426
EW010428 EW010431 EW010432 EW010433 EW010435 EW010436 EW010438 EW010439
EW010440 EW010441 EW010442 EW010443 EW010444 EW010447 EW010501 EW010503
EW010517 EW010518 EW010519 EW010520 EW010521 EW010522 EW010523 EW010524
EW010595 EW010607 EW010618 EW010621 EW010628 EW010629 EW010631

OPERATIONS (WASTEWATER) (2) EW010264 EW010590

*OPERATIONS (WATER) (31) EW008982 EW009418 EW009963 EW010173 EW010174 EW010224 EW010225
EW010268 EW010269 EW010347 EW010355 EW010356 EW010410 EW010413 EW010418
EW010424 EW010434 EW010449 EW010451 EW010452 EW010454 EW010455 EW010456
EW010457 EW010458 EW010503 EW010505 EW010616 EW010626 EW010630 EW010647

OPERATIONS (WATER) (1) EW010620

*OPERATOR TRAINING (4) EW008622 EW010431 EW010621 EW010622

*OREGON (1) EW010525

*ORGANIC COMPOUNDS (12) EW010280 EW010333 EW010356 EW010366 EW010410 EW010437 EW010441
EW010445 EW010502 EW010605 EW010606 EW010636

*ORGANIZATION DEVELOPMENT (1) EW010422

*OVERLAND FLOW (1) EW010456

*OVERLAND FLOW PROCESS (1) EW010276

OXIDANTS (1) EW010410

*OXYGEN (1) EW010446

*OXYGEN DEMAND (1) EW010443

*OXYGEN TRANSFER (1) EW010330

*OXYGEN UPTAKE (1) EW010333

*OXYOZOSYNTHESIS (1) EW010425

*OZONE (1) EW010424

*PACIFIC ISLANDS (1) EW010375

*PACKAGE TREATMENT PLANTS (1) EW010173

*PAINTING (1) EW010453

*PARASITES (1) EW010617

*PATENTS (1) EW010413

*PELLET REACTORS (1) EW010347

*PERFORMANCE EVALUATION (45) EW008973 EW008982 EW009968 EW010172 EW010173 EW010175 EW010240
EW010243 EW010267 EW010277 EW010278 EW010279 EW010280 EW010310 EW010329
EW010330 EW010331 EW010332 EW010333 EW010334 EW010338 EW010347 EW010348
EW010357 EW010365 EW010383 EW010384 EW010422 EW010438 EW010439 EW010440
EW010443 EW010451 EW010458 EW010503 EW010517 EW010518 EW010519 EW010521
EW010523 EW010607 EW010615 EW010623 EW010643 EW01064[illegible]

*PERMISSIONS (1) EW010349

*PERSONNEL (4) EW010343 EW010344 EW010345 EW010346

PERSONNEL (2) EW010620 EW010621

*PERSONNEL DEVELOPMENT (1) EW009235

*PERSONNEL PROGRAMS (1) EW010343

PESTICIDES (6) EW005545 EW010318 EW010319 EW010320 EW010321 EW010322

*PETROLEUM REFINERIES (1) EW008973

*PH (2) EW010332 EW010355

*PHOSPHORUS (3) EW010281 EW010353 EW010591

*PHOTOGRAPHY (4) EW010639 EW010640 EW010641 EW010642

*PHYSICAL PROPERTIES (1) EW010278

*PILOT PROJECTS (1) EW010367

*PILOT STUDIES (1) EW010280

*PILOT TESTS (2) EW010440 EW010443

*PIPE (3) EW009543 EW009544 EW010459

*PIPE CHARACTERISTICS (1) EW009543

*PIPE JOINTS (1) EW010615

*PIPE RELINING (1) EW010459

*PIPES (8) EW009542 EW010222 EW010325 EW010326 EW010427 EW010615 EW010619
EW010647

*PIPE VOLUME (1) EW010326

*PLANNING (23) EW009235 EW009417 EW009418 EW009419 EW010216 EW010235 EW010236
EW010312 EW010313 EW010324 EW010342 EW010344 EW010345 EW010377 EW010388
EW010389 EW010429 EW010430 EW010447 EW010592 EW010611 EW010633 EW010650

*POLICIES (4) EW010388 EW010392 EW010412 EW010417
*POLICY (1) EW010324
*POLICY IMPLEMENTATION (1) EW010412
*POLISHING PONDS (1) EW010426
*POLLUTANTS (4) EW010314 EW010327 EW010336 EW010398
*POLLUTION (3) EW010122 EW010626 EW010627
*POLLUTION CONTROL (8) EW010311 EW010312 EW010353 EW010391 EW010392 EW010403 EW010409 EW010437
POLLUTION CONTROL (1) EW010504
*POLYELECTROLYTES (1) EW010365
*PONDS (2) EW010317 EW010350
*PORTEOUS HEAT TREATMENT (1) EW010194
*POSTSECONDARY EDUCATION (16) EW008622 EW010194 EW010195 EW010252 EW010253 EW010384 EW010394 EW010395 EW010396 EW010397 EW010401 EW010402 EW010414 EW010594 EW010625 EW010628
POSTSECONDARY EDUCATION (6) EW010318 EW010319 EW010320 EW010321 EW010322 EW010419
*POWDERED ACTIVATED CARBON (1) EW010501
*POWER PLANTS (1) EW010645
*POWER UTILITIES (1) EW010350
*PRETREATMENT (1) EW010314
*PREVENTIVE MAINTENANCE (3) EW009967 EW010436 EW010611
*PRIORITY POLLUTANTS (1) EW010280
*PRIVATIZATION (1) EW010421
*PROBES (1) EW010513
*PROBLEM IDENTIFICATION (1) EW010216
PROCESS CONTROL (1) EW010504
*PROGRAM DESCRIPTIONS (1) EW010264
*PROGRAM DEVELOPMENT (1) EW010324
*PROGRAM EVALUATION (2) EW009235 EW009968
*PROGRAMMABLE CONTROLLERS (1) EW010434
*PROJECT APPRAISAL (1) EW010246
*PROJECT DEVELOPMENT (1) EW010315
*PSYCHOLOGY (1) EW010423

*PUBLIC ACCEPTANCE (1) EW0103[illegible]5

*PUBLIC HEALTH (14) EW010243 EW010246 EW010266 EW010282 EW010359 EW010367 EW010392 EW010405 EW010406 EW010414 EW010437 EW010613 EW010617 EW010638

PUBLIC HEALTH (2) EW005545 EW010265

*PUBLIC PARTICIPATION (1) EW010324

*PUBLIC WORKS (1) EW010337

*PUMPING (1) EW010609

*PUMPING TEST DATA (1) EW010510

*PUMPS (10) EW010223 EW010224 EW010225 EW010380 EW010383 EW010436 EW010506 EW010609 EW010612 EW010649

*PUMP STATIONS (2) EW010647 EW010649

*PVC PIPE (3) EW009543 EW009544 EW010325

*QUALITY CONTROL (1) EW010341

*RADIATION (1) EW010398

*RADIOACTIVE ISOTOPES (1) EW010409

*RADIOACTIVE MATERIALS (1) EW010398

*RADIOACTIVE WASTES (1) EW010405

*RANGELAND (1) EW010388

*RATES (1) EW010429

*RAW WATER (1) EW010409

*READING (1) EW010605

*RECOMMENDATIONS (11) EW009622 EW010241 EW010327 EW010337 EW010342 EW010343 EW010360 EW010514 EW010589 EW010639 EW010643

*RECORDKEEPING (1) EW010611

*RECREATION (1) EW010282

RECREATION (2) EW005545 EW010522

*RECRUITMENT (1) EW010344

*RECURSIVE TRAINING (1) EW009999

*RECYCLING (4) EW010270 EW010374 EW010522 EW010592

*REFERENCE LIBRARIES (1) EW010351

*REFERENCE MATERIALS (4) EW010595 EW010636 EW010637 EW010638

*REGENERATED CARBON (2) EW010501 EW010503

*REGULATIONS (8) EW009234 EW010315 EW010352 EW010369 EW010370 EW010371 EW010404 EW010597

REGULATIONS (1) EW010410
*REHABILITATION (2) EW010459 EW010593
*REMOTE CONTROLS (1) EW010608
*REPAIR (1) EW010436
*RESEARCH (15) EW010119 EW010311 EW010331 EW010399 EW010406 EW010415 EW010441 EW010446 EW010518 EW010519 EW010520 EW010521 EW010522 EW010523 EW010604
RESEARCH (2) EW010410 EW010417
*RESEARCH NEEDS (2) EW010363 EW010327
RESEARCH NEEDS (1) EW005545
*RESEARCH REPORTS (27) EW003961 EW008973 EW008982 EW010172 EW010175 EW010267 EW010277 EW010278 EW010279 EW010281 EW010282 EW010315 EW010329 EW010332 EW010333 EW010334 EW010335 EW010365 EW010366 EW010368 EW010374 EW010445 EW010457 EW010599 EW010603 EW010614 EW010615
*RESEARCH REVIEWS (1) EW010327
*RESERVOIRS (11) EW009418 EW009969 EW010408 EW010448 EW010449 EW010451 EW010452 EW010453 EW010507 EW010596 EW010623
*RESPONSE GUIDES (2) EW010363 EW010373
*REVERSE OSMOSIS (1) EW010270
*RICE HULLS (1) EW010267
*RISK ANALYSIS (1) EW010282
*RISK ASSESSMENT (1) EW010415
*RIVER CROSSINGS (1) EW010427
*RIVERS (4) EW010362 EW010427 EW010446 EW010525
*ROOT CONTROL (1) EW009967
*ROTATING BIOLOGICAL CONTACTORS (2) EW010272 EW010443
*ROYALTIES (1) EW010349
*RURAL AREAS (7) EW010216 EW010264 EW010266 EW010367 EW010375 EW010377 EW010383
RURAL AREAS (2) EW010265 EW010359
*SAFETY (8) EW005545 EW008639 EW010337 EW010394 EW010590 EW010597 EW010628 EW010637
*SALARIES (1) EW010343
*SALARY PROGRAMS (1) EW010343
*SALINITY (1) EW010242
*SAMPLING (13) EW008639 EW010242 EW010335 EW010336 EW010341 EW010363 EW010411 EW010509 EW010511 EW010513 EW010516 EW010616 EW010624
*SAMPLING METHODS (1) EW010511

*SAND FILTRATION	(2)	EW010268 EW010269
SAN DIEGO (CALIFORNIA)	(1)	EW010459
*SANITATION	(6)	EW010243 EW010246 EW010359 EW010375 EW010414 EW010614
SANITATION	(1)	EW010265
*SEALERS	(1)	EW010623
*SECONDARY CLARIFICATION	(1)	EW010439
*SECONDARY EFFLUENT	(1)	EW010522
*SECONDARY TREATMENT	(5)	EW010272 EW010276 EW010317 EW010444 EW010618
*SEDIMENTS	(1)	EW009969
*SELECTION	(1)	EW010380
*SELF-ESTEEM	(1)	EW010346
*SEMINARS	(1)	EW010435
*SEPARATION TECHNIQUES	(1)	EW010365
*SEPTIC TANKS	(1)	EW010281
*SERVICE RATES	(1)	EW010429
*SETTLERS	(1)	EW010439
*SEWAGE	(1)	EW010119
*SEWER PIPES	(1)	EW010325
*SEWERS	(5)	EW009542 EW009967 EW010326 EW010593 EW010634
*SIMULATIONS	(2)	EW010225 EW010431
*SITE SELECTION	(1)	EW010405
*SKILL DEVELOPMENT	(1)	EW010252
*SLIDES	(2)	EW010194 EW010195
*SLUDGE	(16)	EW010194 EW010195 EW010226 EW010238 EW010278 EW010313 EW010315 EW010329 EW010340 EW010352 EW010354 EW010384 EW010432 EW010445 EW010519 EW010521
*SLUDGE BULKING	(1)	EW010520
*SLUDGE DIGESTION	(1)	EW010521
*SLUDGE DISPOSAL	(2)	EW010340 EW010352
*SLUDGE MANAGEMENT	(1)	EW010313
*SLUDGE TREATMENT	(1)	EW010425
*SOCIAL IMPACTS	(1)	EW010308

*SOCIAL RELATIONSHIPS	(1)	EW010327
*SOIL AQUIFER TREATMENT	(2)	EW010522 EW010523
*SOLOMAN ISLANDS	(1)	EW010375
*SPEAKING	(1)	EW010005
*SPECTROSCOPY	(1)	EW010598
*STABILIZATION PONDS	(1)	EW010275
*STANDARD PLATE COUNTS	(1)	EW010614
*STANDARDS	(4)	EW010237 EW010282 EW010381 EW010598
*START-UP	(2)	EW010271 EW010272
*STATE PROGRAMS	(1)	EW010314
*STATISTICS	(2)	EW010399 EW010438
*STEEL TANKS	(2)	EW010385 EW010453
*STORAGE TANKS	(1)	EW010385
*STORMWATER	(2)	EW008961 EW010338
*STREAMS	(2)	EW010362 EW010408
*STRUCTURAL FAILURES	(1)	EW010351
*SUCCESS-CASE METHOD	(1)	EW010004
*SUDAN	(2)	EW010241 EW010269
*SULFUR DIOXIDE	(1)	EW010332
*SUPERVISION	(1)	EW010594
*SUPPORTS	(1)	EW009544
*SURFACE RUNOFF	(3)	EW008961 EW010175 EW010338
*SURFACE WATER	(3)	EW010395 EW010400 EW010509
*SURVEYS	(8)	EW010122 EW010240 EW010269 EW010331 EW010457 EW010603 EW010604 EW010632
*SUSPENDED SOLIDS	(1)	EW010426
*SWING-CHECK VALVES	(1)	EW010610
*SYSTEM REGULATIONS	(1)	EW010596
*SYSTEMS ANALYSIS	(1)	EW009418
*TANKS	(5)	EW010450 EW010451 EW010452 EW010453 EW010507
*TECHNIQUES	(3)	EW010639 EW010641 EW010642
*TECHNOLOGY	(10)	EW010350 EW010370 EW010371 EW010373 EW010383 EW010413 EW010504 EW010512 EW010513 EW010627

TECHNOLOGY	(6)	EW010216 EW010318 EW010319 EW010320 EW010321 EW010322
*TELECONFERENCING	(1)	EW010342
*TELEMETRY	(1)	EW010608
*TEMPERATURE	(2)	EW010350 EW010354
*TEMPERATURE MEASUREMENT	(1)	EW010598
*TEXAS	(1)	EW010650
*TEXTBOOKS	(1)	EW005545
*THERAPEUTIC LISTENING	(1)	EW010001
*THERMAL MOVEMENT	(1)	EW010604
*THM	(2)	EW008982 EW010410
*TOTAL ORGANIC HALOGEN	(1)	EW010515
*TOXIC CHEMICALS	(1)	EW010441
*TOXICOLOGY	(2)	EW010403 EW010638
*TOXIC SUBSTANCES	(2)	EW010280 EW010445
*TRACE ANALYSIS	(1)	EW010633
*TRAINING	(19)	EW009234 EW009235 EW009968 EW009999 EW010000 EW010002 EW010003 EW010004 EW010241 EW010252 EW010271 EW010375 EW010422 EW010423 EW010431 EW010435 EW010506 EW010594 EW010621
TRAINING	(2)	EW010173 EW010622
*TRAINING PROGRAMS	(2)	EW010337 EW010621
*TREATMENT PONDS	(1)	EW010317
*TRENDS	(5)	EW009234 EW010119 EW010368 EW010643 EW010644
*TRICKLING FILTERS	(1)	EW009237
*TRIHALOMETHANES	(3)	EW008982 EW010381 EW010410
*TROPICS	(1)	EW010414
*TROUBLESHOOTING	(1)	EW010380
*TURBIDITY	(1)	EW010508
*ULTRA-PURE WATER	(1)	EW010270
*ULTRAVIOLET LIGHT	(1)	EW010279
*UNDERGROUND SUPPORTS	(1)	EW009544
*UNDERSTANDING	(1)	EW010005
*UNIT PROCESSES	(1)	EW010174

*UNLEARNING (1) EW010000
*URBAN AREAS (2) EW008961 EW010175
URBAN DEVELOPMENT (1) EW009419
*URBAN RUNOFF (1) EW010338
*UTILITIES (4) EW010235 EW010310 EW010620 EW010632
UTILITIES (2) EW010594 EW010622
*UTILITY MAINTENANCE PROGRAMS (1) EW010625
*VADOSE ZONE (1) EW010511
*VALVES (3) EW010610 EW010611 EW010612
*VIBRIONACEAE (1) EW010406
*VIDEOCASSETTES (1) EW010349
*VIDEOTAPES (2) EW010252 EW010253
*VIRGINIA (5) EW009969 EW010224 EW010226 EW010237 EW010633
*VITRIFIED CLAY PIPE (1) EW010325
*VOLATILE ORGANIC COMPOUNDS (1) EW010356
*WASHINGTON (2) EW010281 EW010647
*WASTE COLLECTION (1) EW010397
*WASTE DISPOSAL (13) EW010119 EW010238 EW010315 EW010340 EW010352 EW010359 EW010375 EW010397 EW010404 EW010405 EW010414 EW010445 EW010597
WASTE DISPOSAL (5) EW010318 EW010319 EW010320 EW010321 EW010322
*WASTES (1) EW010397
*WASTEWATER (10) EW008639 EW009234 EW010318 EW010319 EW010320 EW010321 EW010322 EW010441 EW010606 EW010624
*WASTEWATER COLLECTION (7) EW009967 EW010338 EW010593 EW010628 EW010629 EW010634 EW010649
WASTEWATER COLLECTION (1) EW010590
*WASTEWATER DISPOSAL (2) EW010352 EW010631
*WASTEWATER TREATMENT (105) EW008622 EW008973 EW009235 EW009236 EW009237 EW010172 EW010175 EW010194 EW010195 EW010216 EW010237 EW010238 EW010240 EW010271 EW010272 EW010273 EW010274 EW010275 EW010276 EW010277 EW010278 EW010279 EW010280 EW010281 EW010309 EW010310 EW010310 EW010312 EW010313 EW010314 EW010315 EW010316 EW010317 EW010318 EW010319 EW010320 EW010321 EW010322 EW010328 EW010329 EW010330 EW010331 EW010332 EW010333 EW010334 EW010335 EW010340 EW010353 EW010354 EW010355 EW010360 EW010365 EW010367 EW010368 EW010372 EW010374 EW010384 EW010413 EW010416 EW010418 EW010419 EW010421 EW010425 EW010426 EW010428 EW010429 EW010431 EW010432 EW010433 EW010435 EW010436 EW010437 EW010438 EW010439 EW010440 EW010442 EW010443 EW010444 EW010445 EW010447 EW010501 EW010502 EW010503 EW010517 EW010518 EW010519 EW010520 EW010521 EW010522 EW010523 EW010524 EW010590 EW010591 EW010592 EW010594 EW010595 EW010605 EW010607 EW010617 EW010618 EW010621 EW010623 EW010631 EW010648 EW010649

WASTEWATER TREATMENT	(4)	EW009419 EW010243 EW010504 EW010625
*WATER	(13)	EW008639 EW009234 EW010308 EW010361 EW010395 EW010396 EW010400 EW010401 EW010402 EW010603 EW010604 EW010606 EW010624
WATER	(5)	EW010318 EW010319 EW010320 EW010321 EW010322
WATER ANALYSIS	(1)	EW010399
*WATER CONSERVATION	(3)	EW010270 EW010312 EW010412
*WATER DEPARTMENTS	(1)	EW010620
*WATER DISTRIBUTION	(23)	EW010221 EW010223 EW010225 EW010236 EW010239 EW010359 EW010386 EW010449 EW010450 EW010452 EW010453 EW010459 EW010505 EW010507 EW010589 EW010608 EW010609 EW010611 EW010612 EW010613 EW010614 EW010647 EW010650
*WATER FLOW	(1)	EW010619
WATER HYACINTH	(1)	EW010607
*WATER LOSSES	(1)	EW010589
*WATER MAINS	(1)	EW010647
*WATER METERS	(1)	EW010589
*WATER PIPE	(1)	EW010459
*WATER PIPES	(4)	EW010222 EW010325 EW010427 EW010615
*WATER POLLUTION	(2)	EW009234 EW010311
WATER POLLUTION	(5)	EW010318 EW010319 EW010320 EW010321 EW010322
*WATER POLLUTION CONTROL	(5)	EW010314 EW010350 EW010357 EW010626 EW010627
*WATER PROJECTS	(1)	EW010377
*WATER PUMPS	(1)	EW010223
*WATER QUALITY	(46)	EW008961 EW009234 EW009418 EW010119 EW010242 EW010243 EW010266 EW010282 EW010308 EW010311 EW010318 EW010319 EW010320 EW010321 EW010322 EW010336 EW010352 EW010363 EW010373 EW010377 EW010381 EW010391 EW010392 EW010395 EW010406 EW010408 EW010409 EW010418 EW010420 EW010424 EW010446 EW010447 EW010502 EW010509 EW010510 EW010511 EW010515 EW010516 EW010522 EW010525 EW010596 EW010599 EW010617 EW010626 EW010635 EW010644
WATER QUALITY	(3)	EW010265 EW010411 EW010417
*WATER QUALITY CONTROL	(1)	EW010353
*WATER RATES	(2)	EW010174 EW010235
*WATER RESOURCES	(20)	EW009419 EW009969 EW010241 EW010242 EW010308 EW010318 EW010319 EW010320 EW010321 EW010322 EW010359 EW010361 EW010388 EW010389 EW010391 EW010395 EW010417 EW010511 EW010599 EW010644
*WATER REUSE	(3)	EW010270 EW010522 EW010592
WATER REUSE	(1)	EW010417
*WATERSHED PLANNING	(1)	EW010338

*WATERSHEDS (1) EW010409

*WATER SOFTENING (1) EW010347

*WATER SOURCES (1) EW010375

*WATER STORAGE (8) EW010385 EW010448 EW010449 EW010450 EW010451 EW010452 EW010453 EW010650

*WATER SUPPLIES (1) EW010414

*WATER SUPPLY (41) EW009419 EW009969 EW010174 EW010223 EW010224 EW010225 EW010235 EW010236 EW010239 EW010241 EW010243 EW010246 EW010264 EW010266 EW010312 EW010359 EW010361 EW010375 EW010377 EW010383 EW010385 EW010386 EW010388 EW010389 EW010391 EW010409 EW010412 EW010417 EW010424 EW010505 EW010506 EW010507 EW010509 EW010608 EW010609 EW010611 EW010612 EW010614 EW010630 EW010647 EW010650

WATER SUPPLY (2) EW010265 EW010592

*WATER SYSTEMS (1) EW009418

*WATER TABLE (1) EW010516

*WATER TANKS (5) EW010450 EW010451 EW010452 EW010453 EW010567

*WATER TREATMENT (50) EW008622 EW008982 EW009418 EW009963 EW010173 EW010174 EW010221 EW010226 EW010266 EW010267 EW010268 EW010269 EW010270 EW010318 EW010319 EW010320 EW010321 EW010322 EW010327 EW010347 EW010348 EW010350 EW010355 EW010356 EW010359 EW010373 EW010394 EW010410 EW010413 EW010418 EW010424 EW010429 EW010430 EW010434 EW010437 EW010454 EW010455 EW010456 EW010457 EW010458 EW010503 EW010508 EW010605 EW010613 EW010616 EW010617 EW010626 EW010630 EW010635 EW010648

WATER TREATMENT (5) EW009419 EW010243 EW010264 EW010620 EW010625

*WATER USE (1) EW010412

WATER USE (1) EW010417

*WATER UTILITIES (2) EW010224 EW010430

*WATER WELLS (1) EW010242

*WEATHERING (1) EW010396

*WEATHER MODIFICATION (1) EW010389

*WELDING (1) EW010252

*WELLS (2) EW010336 EW010514

*WET AIR OXIDATION (1) EW010354

*WETLANDS (2) EW010599 EW010607

*WORLD PROBLEMS (4) EW009417 EW010246 EW010311 EW010626

WORLD PROBLEMS (2) EW010243 EW010264

*WRITING (1) EW010005